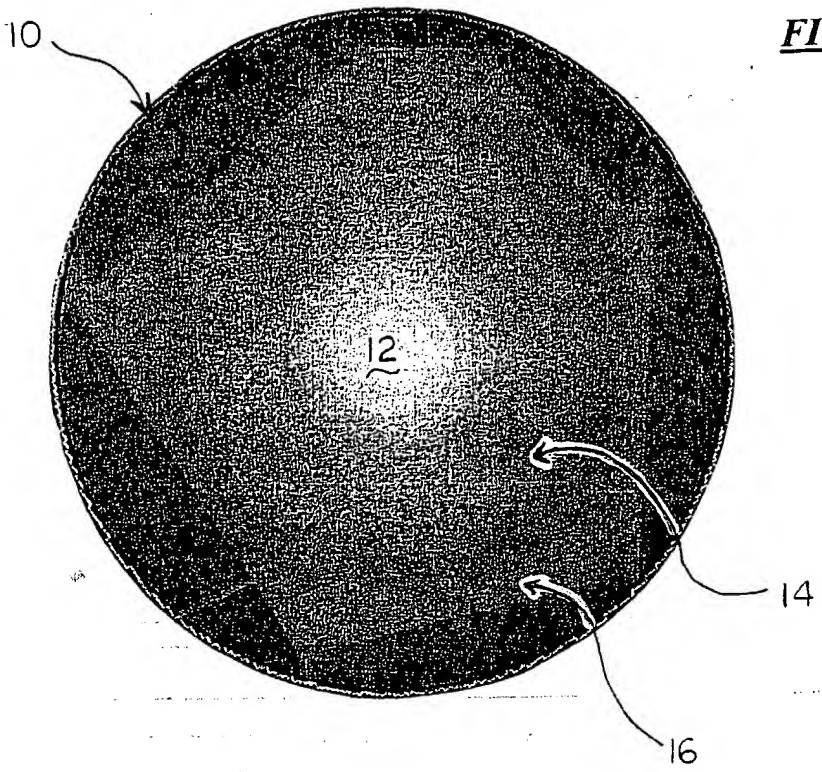


FIG. - 1

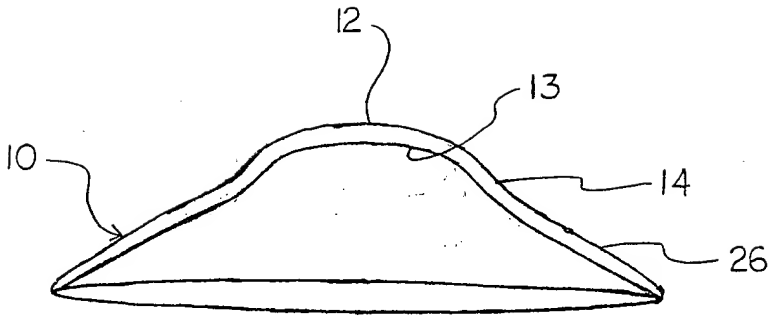


FIG. - 2

FIG. - 3

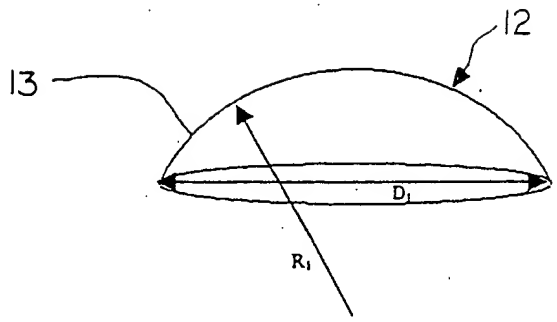


FIG. - 5A

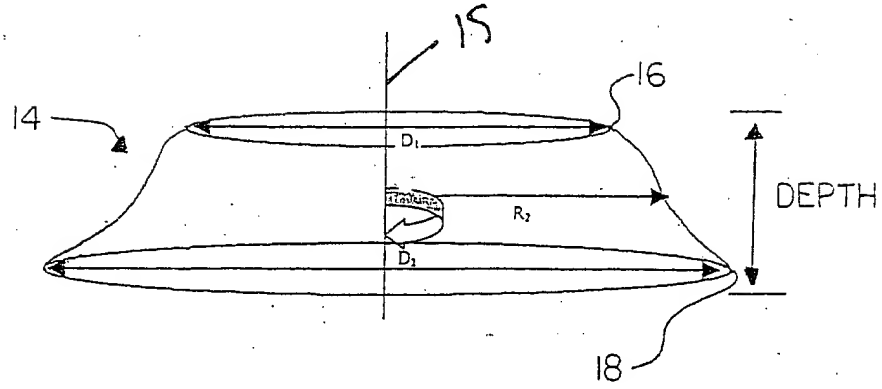


FIG.-4A

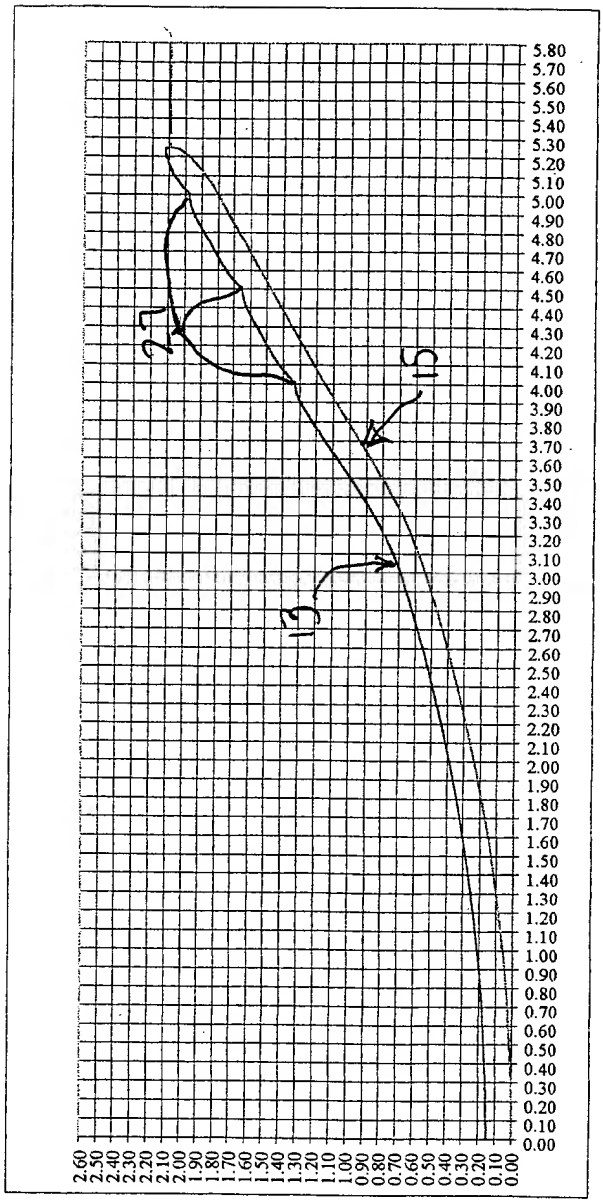
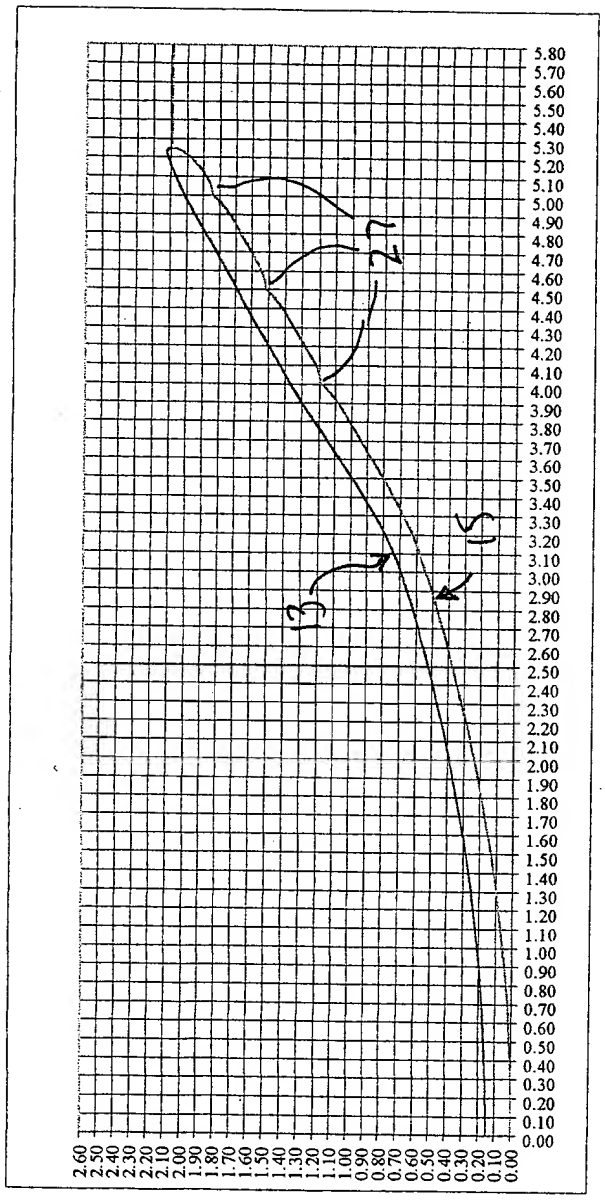


FIG.-4B



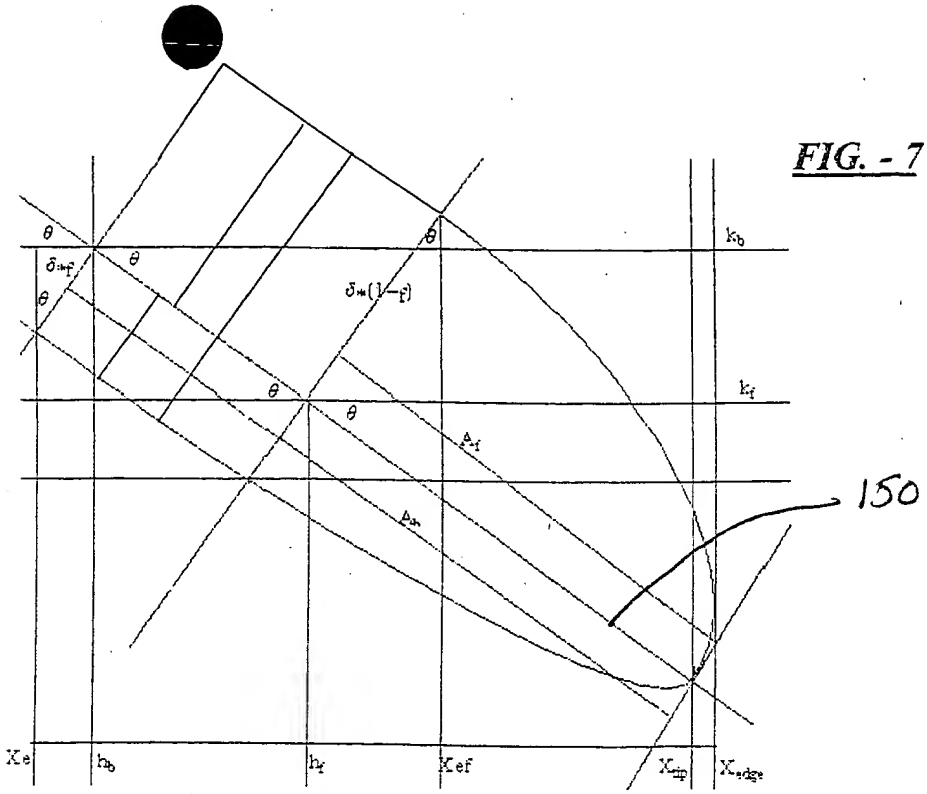


FIG. - 7

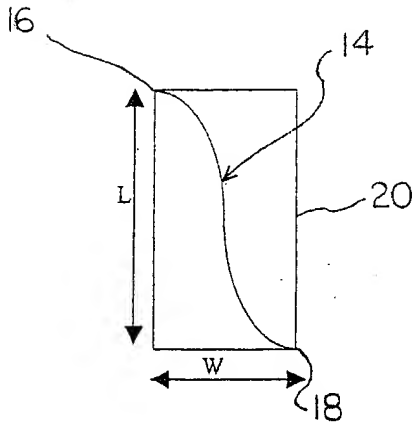


FIG. - 5B

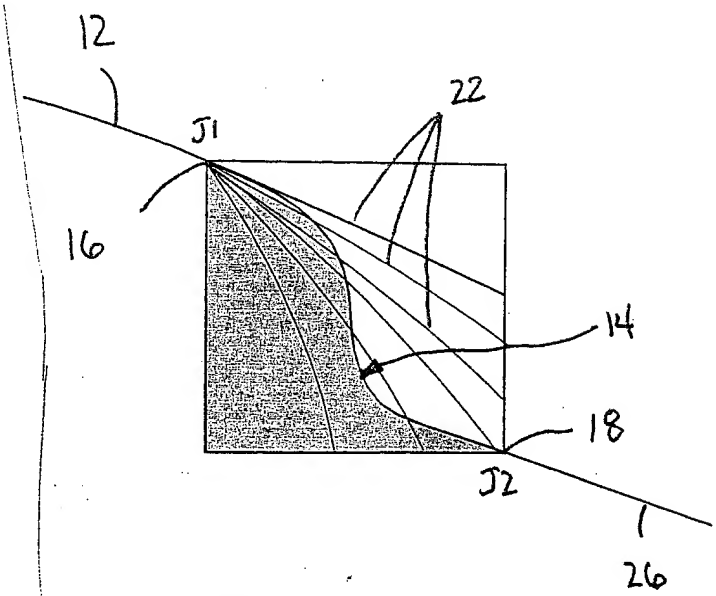
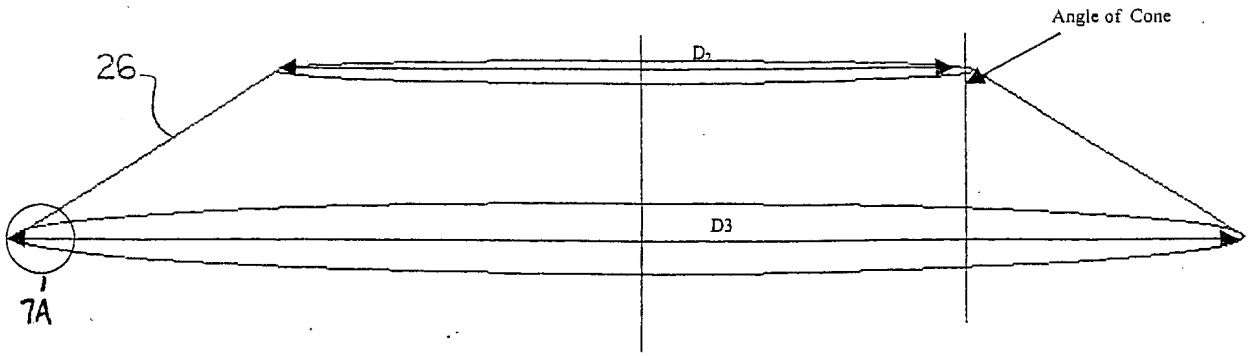
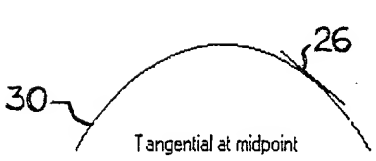
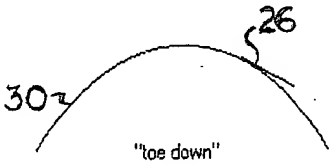


FIG. - 5C

FIG. - 6







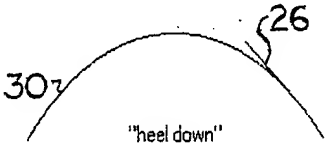


FIG. - 8A FIG. - 8B FIG. - 8C

	208				200	202	204	
BC	Selected bc (6.9-10.4/0.1) (7.70-9.1/.05)	8.40	Suggested Base Curve is 8.4					
J1	Radial distance (OZ/2) from the lens center to 1st junction mm (1.0-5.9/0.1) 210	3.00	1	corneal apical radius (mm)	lens / cornea power (D) difference wanted	ellipticity of the cornea	HVID (mm)	
SW	Width of the S curve mm (.75,1)	1.00	EYE	7.58	-4.50	0.5	11.6	
MAT	Lens material (FP30, FP60, FP92, FP151, HDS, Other)	212 HDS	Ref. Index of material used = 1.449 If 'other' was selected input RI in Cell H4	Volume between BC and cornea (uL) = 0.994	Actual power (D) difference between bc and apical cornea = -4.35	Desired edge lift (mm) when landed at full Diameter = 0.083	1.45	
P	lens power desired (-1.00, -0.50, 0.00, 0.50, 0.75, 1.0, 1.25, 1.5, 2.0, 2.5)	214 0.50	Front Surface central radius = 8.37	Volume between S curve and cornea (uL) = 1.739	Recommended diameter for lentic = 8.024	Ab, the long axis of the ellipse creating the base curve edge (below)	FOR SPHERICAL FRONTS target edge thickness below	
ϕ	Delta R (mm) translation of 1st junction radially from BC origin (0.08-0.2/0.02)	222 0.14	True center thickness (mm) = 0.152 224	Volume between pretouch Landing Zone and cornea (uL) = 0.718	recommended radius of curve for lentic = 8.106	0.40	0.18	
ϕ2	Delta R (mm) translation of 2nd junction radially from BC origin (0.1-0.22/0.02)	0.18	true offset between landing zones at J2 = 0.179	TOTAL VOLUME = 3.451(uL)	Origin for lentic curve is on y axis displaced from apex of front curve = 8.068	Af, the long axis of the ellipse creating the front curve edge (below)	SPHERICAL FRONTS- max thickness peripheral to J1 before lentic (in mm > Delta 2) see below	
A	Angle of the landing zone (-25.5 to -50.0/.5)	216 -35.00	Present lens height (mm) above cornea at diameter of tangential touch = 0.040	Diameter where LZ would make tangential touch = 9.08	Estimated elevation at J2 = 0.070	0.40	0.01	
D	selected lens diameter mm (8.0-12.9/0.1)	209 10.50	Diameter recommended from HVID = 10.6 206	Dia giving desired LZ lift = 10.42	fixed (tear thickness)	base to front at which the transition from base elipse to front elipse is found (below)	Minimum thickness peripheral to J1 before lentic (in mm > Delta 1) see below	
SD	Selected depth of the S curve mm (.15-1.0/.05) (0.3-0.65/ .025) use next smaller than est.	0.500	Recommended depth (mm) S curve for desired correction @6u/D = 0.510 mm	Edge lift at selected diameter = 0.094	0.006	0.25	0.01	
	220		218					

FIG-9

FIG.-10

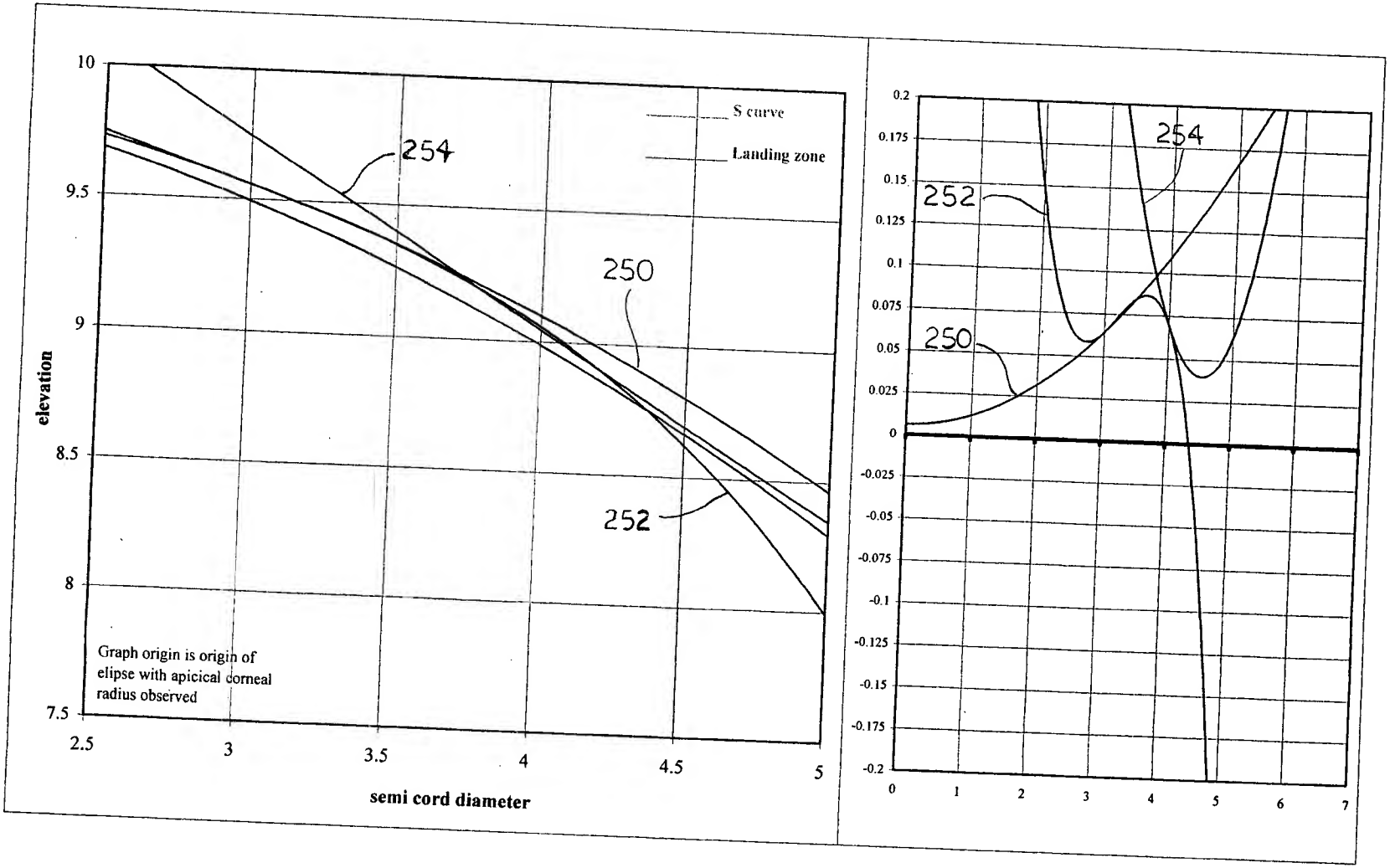

10
9.5
9
8.5
8
7.5
elevation
2.5
3
3.5
4
4.5
5
semi cord diameter
S curve
Landing zone
254
250
252
Graph origin is origin of elipse with apicical corneal radius observed
0.2
0.175
0.15
0.125
0.1
0.075
0.05
0.025
0
-0.025
-0.05
-0.075
-0.1
-0.125
-0.15
-0.175
-0.2
0
1
2
3
4
5
6
7
254
252
250

FIG.-11

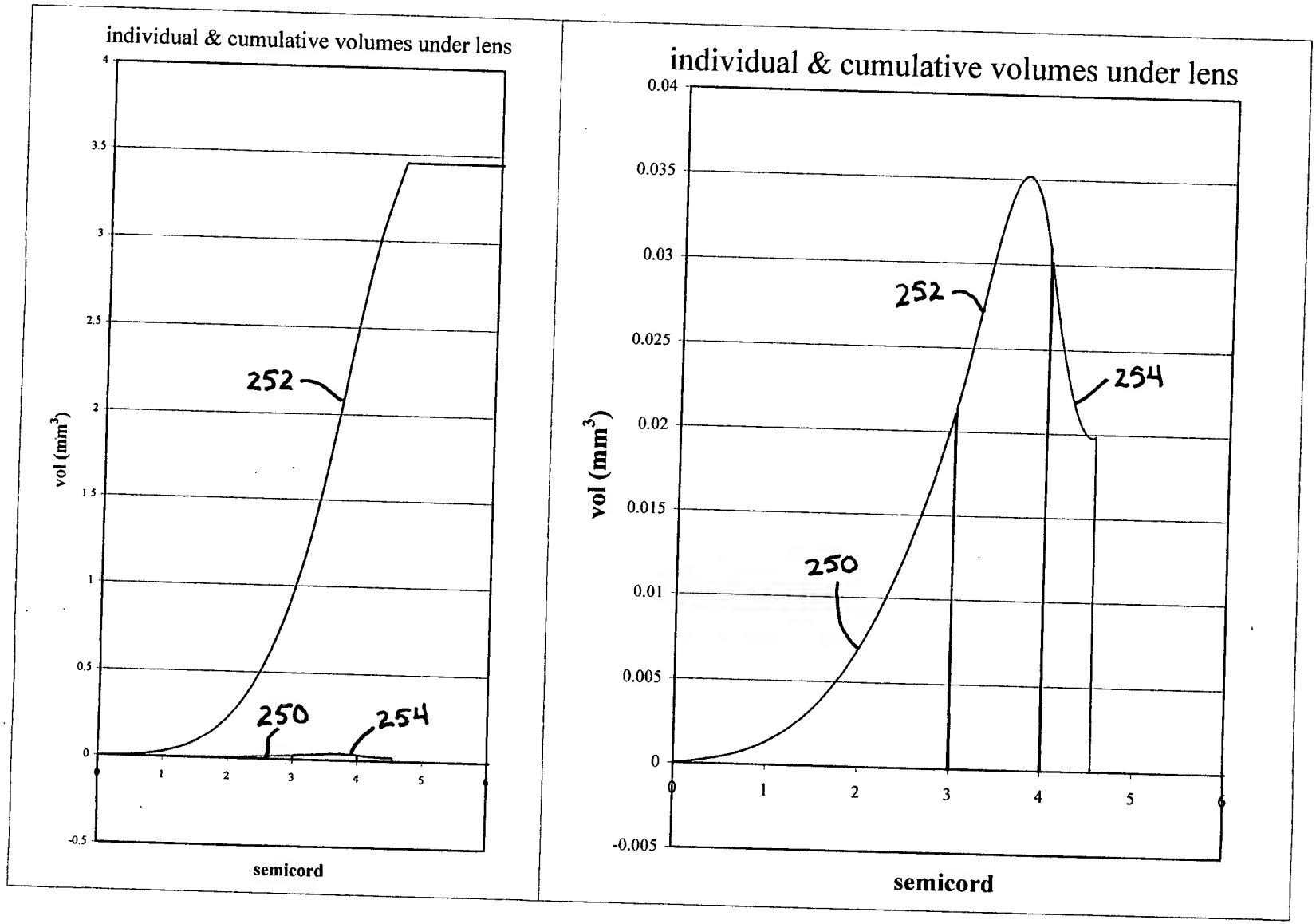

individual & cumulative volumes under lens
vol (mm3)
semicord
252
250
254
individual & cumulative volumes under lens
vol (mm3)
semicord
252
254
250

FIG.-12

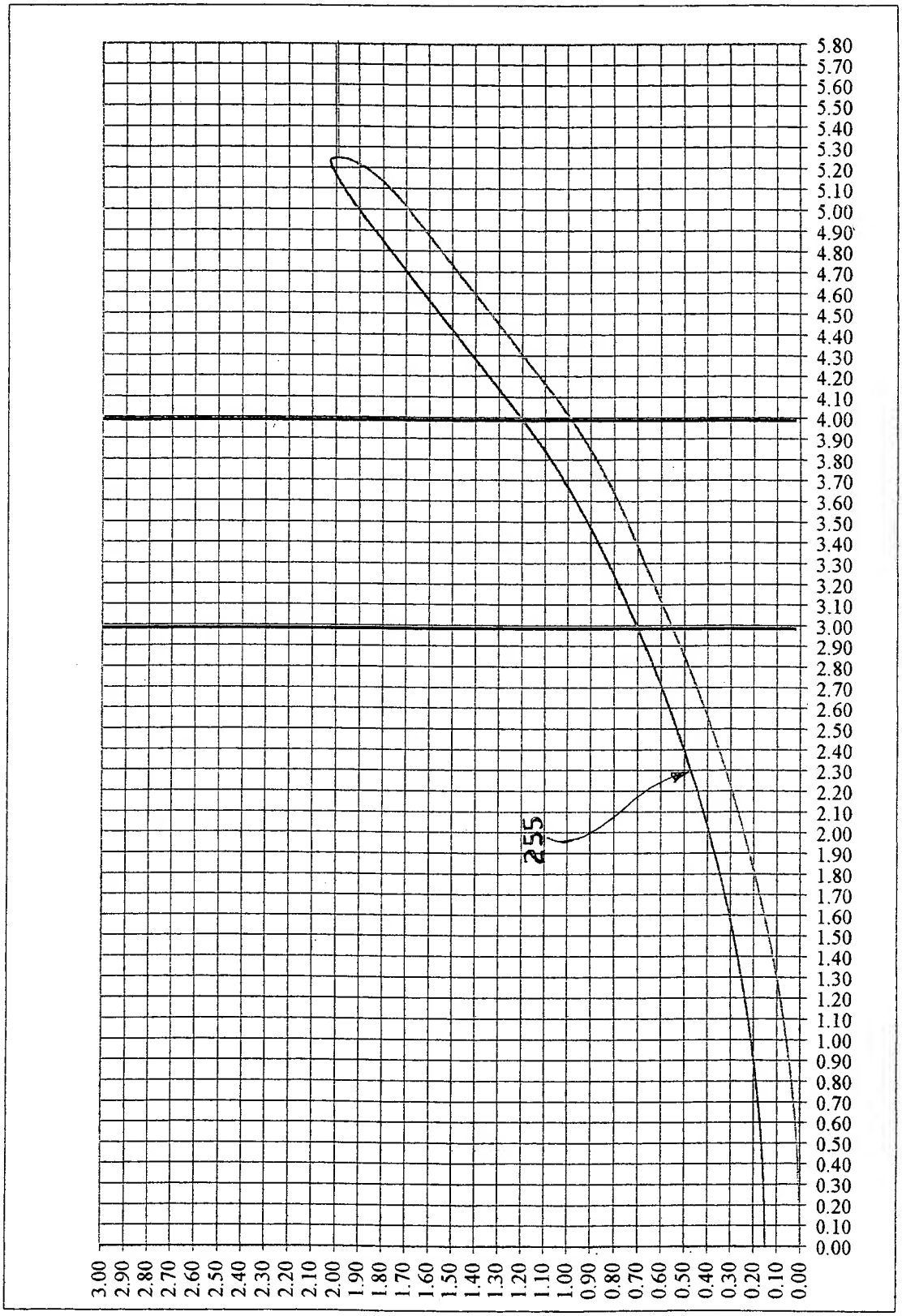
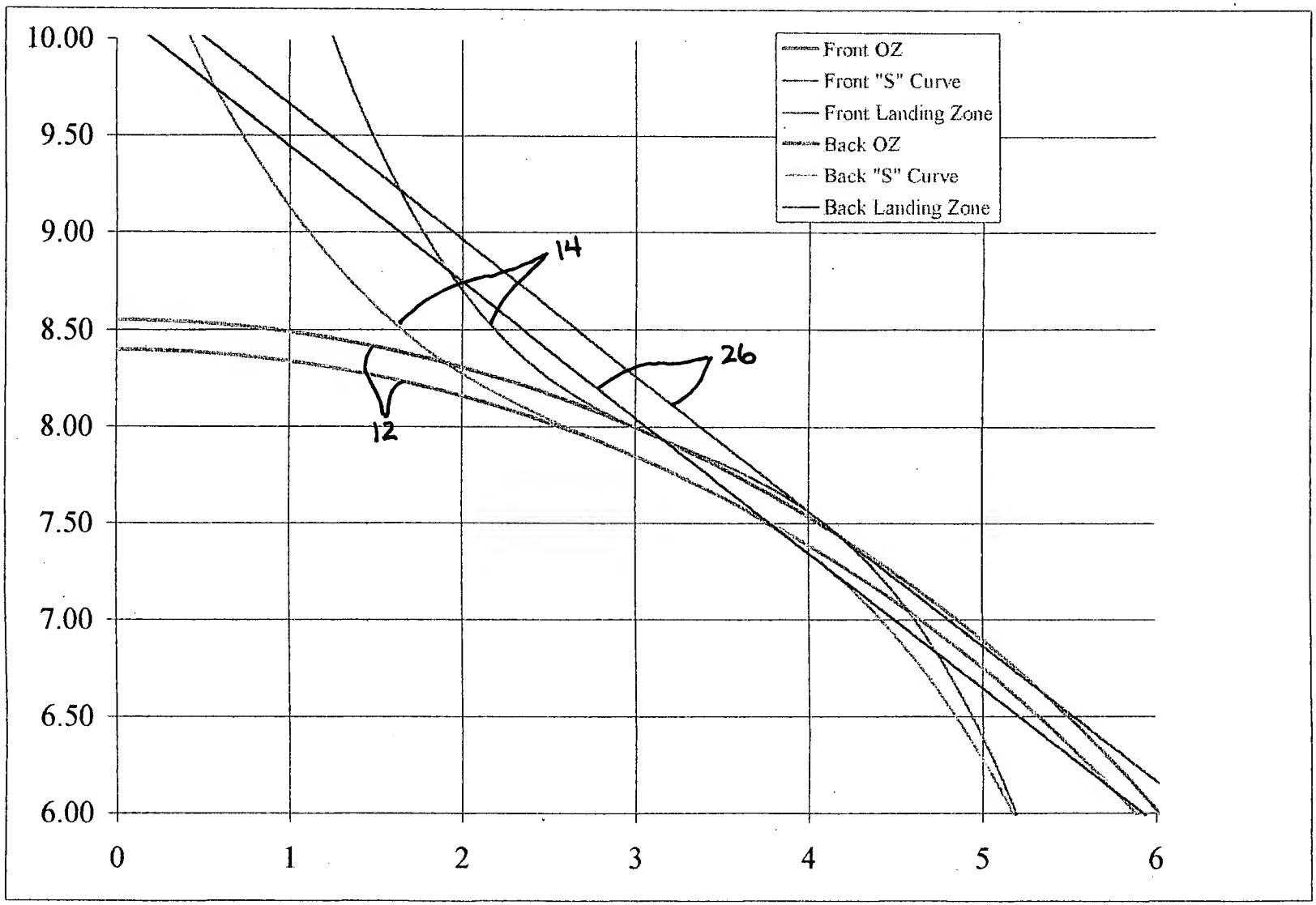

255
5.80
5.70
5.60
5.50
5.40
5.30
5.20
5.10
5.00
4.90
4.80
4.70
4.60
4.50
4.40
4.30
4.20
4.10
4.00
3.90
3.80
3.70
3.60
3.50
3.40
3.30
3.20
3.10
3.00
2.90
2.80
2.70
2.60
2.50
2.40
2.30
2.20
2.10
2.00
1.90
1.80
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
3.00
2.90
2.80
2.70
2.60
2.50
2.40
2.30
2.20
2.10
2.00
1.90
1.80
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00

FIG.-13


10.00
9.50
9.00
8.50
8.00
7.50
7.00
6.50
6.00
0
1
2
3
4
5
6
Front OZ
Front "S" Curve
Front Landing Zone
Back OZ
Back "S" Curve
Back Landing Zone
14
26
12

T02690 T5E16860

BC	Selected bc (6.9-10.4/0.1) (7.70-9.1/.05)	8.90	Suggested Base Curve is 8.9				
J1	Radial distance (OZ/2) from the lens center to 1st junction mm (1.0-5.9/0.1)	3.00	2B	corneal apical radius (mm)	lens / cornea power (D) difference wanted	ellipticity of the cornea	HVID (mm)
SW	Width of the S curve mm (.75,1)	1.00	EYE	8.03	-4.00	0.6	11.4
MAT	Lens material (FP30, FP60, FP92, FP151, HDS, Other)	HDS	Ref. Index of material used = 1.449 If 'other' was selected input RI in Cell H4	Volume between BC and cornea (uL) = 0.926	Actual power (D) difference between bc and apical cornea = -4.11	Desired edge lift (mm) when landed at full Diameter = 0.08	1.45
P	lens power desired (-1.00, -0.50, 0.00, 0.50, 0.75, 1.0, 1.25, 1.5, 2.0, 2.5)	0.50	Front Surface central radius = 8.88	Volume between S curve and cornea (uL) = 1.742	Recommended diameter for lentic = 6.006	Ab, the long axis of the ellipse creating the base curve edge (below)	FOR SPHERICAL FRONTS target edge thickness below
↕	Delta R (mm) translation of 1st junction radially from BC origin (0.08-0.2/0.02)	232 0.20	True center thickness (mm) = 0.214	Volume between pretouch Landing Zone and cornea (uL) = 0.867	recommended radius of curve for lentic = 8.457	0.40	0.18
↕2	Delta R (mm) translation of 2nd junction radially from BC origin (0.1-0.22/0.02)	0.12	true offset between landing zones at J2 = 0.119	TOTAL VOLUME = 3.534(uL)	Origin for lentic curve is on y axis displaced from apex of front curve = 8.430	Af, the long axis of the ellipse creating the front curve edge (below)	SPHERICAL FRONTS- max thickness peripheral to J1 before lentic (in mm > Delta 2) see below
A	Angle of the landing zone (-25.5 to -50.0/.5)	-33.00	Present lens height (mm) above cornea at diameter of tangential touch = 0.041	Diameter where LZ would make tangential touch = 9.26	Estimated elevation at J2 = 0.075	0.40	0.01
D	selected lens diameter mm (8.0-12.9/0.1)	10.40	Diameter recommended from HVID = 10.4	Dia giving desired LZ lift = 10.68	fixed (tear thickness)	base to front at which the transition from base elipse to front elipse is found (below)	Minimum thickness peripheral to J1 before lentic (in mm > Delta 1) see below
SD	Selected depth of the S curve mm (.15-1.0/.05) (0.3-0.65/ .025) use next smaller than est.	0.450	Recommended depth (mm) S curve for desired correction @6u/D = 0.457 mm	Edge lift at selected diameter = 0.071	0.006	0.25	0.01

230

FIG - 14

FIG.-15

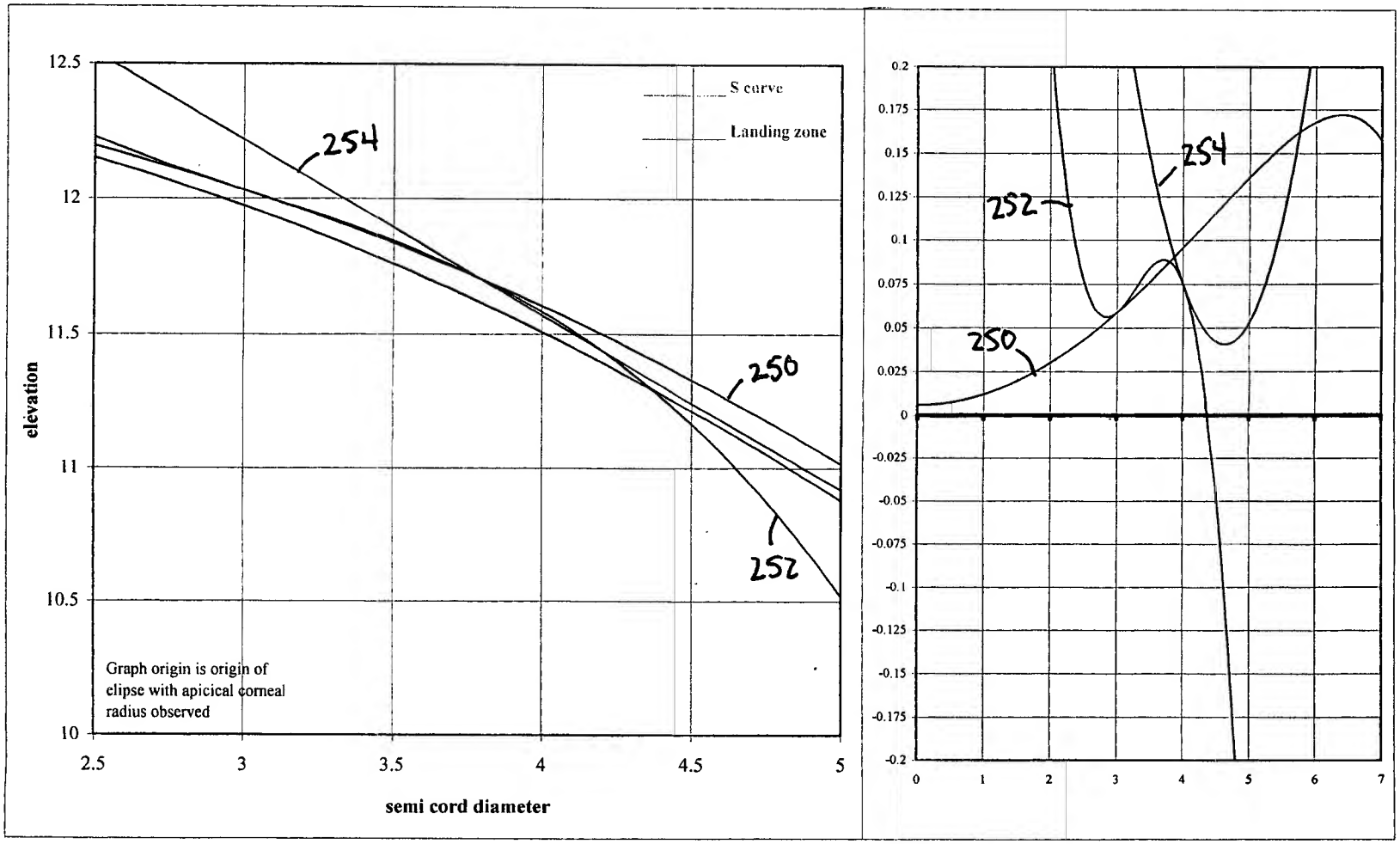

12.5
12
11.5
11
10.5
10
elevation
2.5
3
3.5
4
4.5
5
semi cord diameter
S curve
Landing zone
254
250
252
Graph origin is origin of elipse with apicical corneal radius observed
0.2
0.175
0.15
0.125
0.1
0.075
0.05
0.025
0
-0.025
-0.05
-0.075
-0.1
-0.125
-0.15
-0.175
-0.2
0
1
2
3
4
5
6
7
254
252
250

FIG.-16

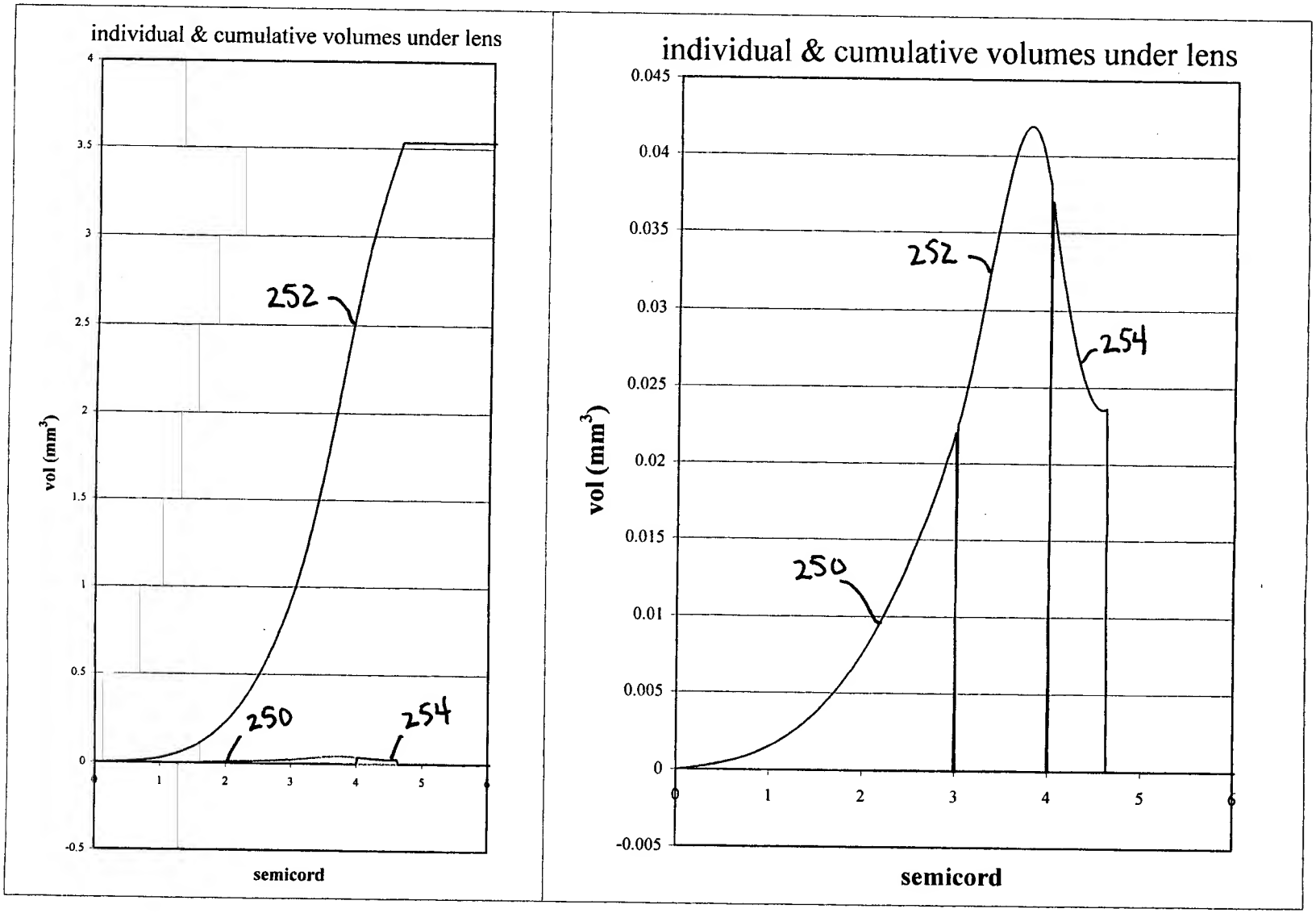

individual & cumulative volumes under lens
vol (mm3)
semicord
252
250
254
individual & cumulative volumes under lens
vol (mm3)
semicord
252
254
250

FIG.-17

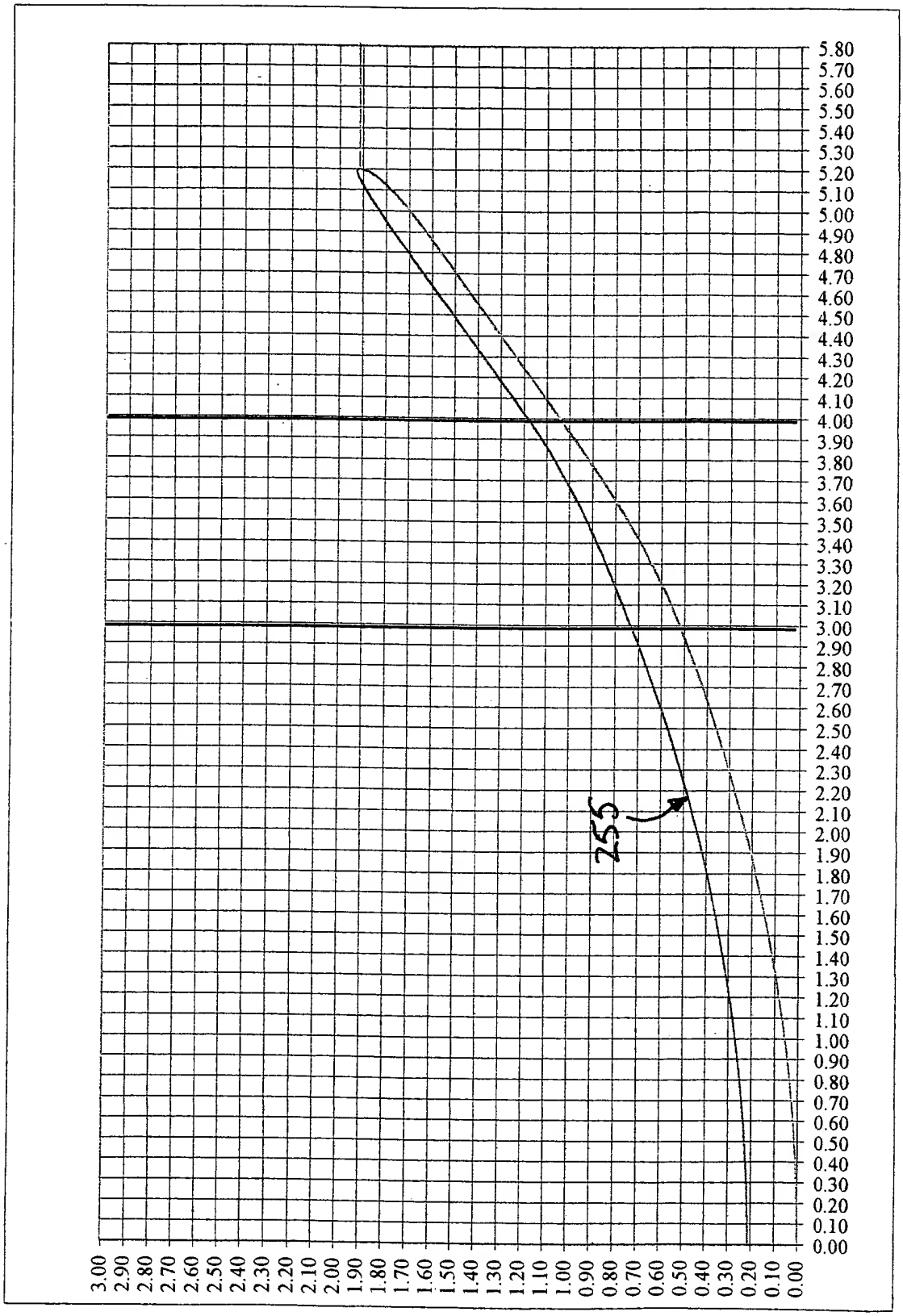
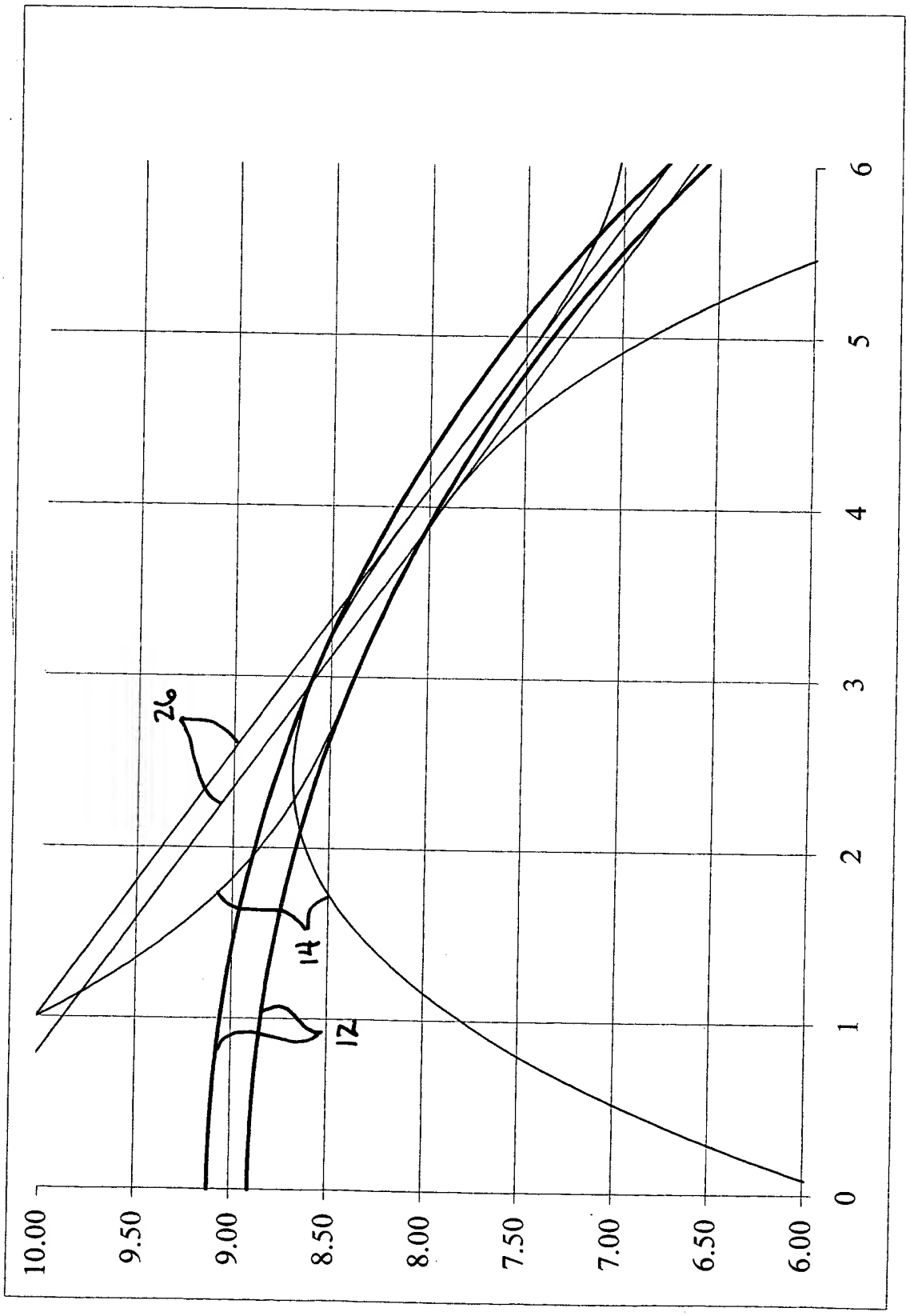

255
5.80
5.70
5.60
5.50
5.40
5.30
5.20
5.10
5.00
4.90
4.80
4.70
4.60
4.50
4.40
4.30
4.20
4.10
4.00
3.90
3.80
3.70
3.60
3.50
3.40
3.30
3.20
3.10
3.00
2.90
2.80
2.70
2.60
2.50
2.40
2.30
2.20
2.10
2.00
1.90
1.80
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
3.00
2.90
2.80
2.70
2.60
2.50
2.40
2.30
2.20
2.10
2.00
1.90
1.80
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00

FIG.-18



T02590 T5eh860

BC	Selected bc (6.9-10.4/0.1) (7.70-9.1/.05)	8.35	Suggested Base Curve is 8.3		200	202	204
J1	Radial distance (OZ/2) from the lens center to 1st junction mm (1.0-5.9/0.1)	210 2.50	3B	corneal apical radius (mm)	lens / cornea power (D) difference wanted	ellipticity of the cornea	HVID (mm)
SW	Width of the S curve mm (.75,1)	212 2.00	EYE	7.25	-6.12	0.4	11.2
MAT	Lens material (FP30, FP60, FP92, FP151, HDS, Other)	HDS	Ref. Index of material used = 1.449 If 'other' was selected input RI in Cell H4	Volume between BC and cornea (uL) = 0.699	Actual power (D) difference between bc and apical cornea = -6.13	Desired edge lift (mm) when landed at full Diameter = 0.09272	1.45
P	lens power desired (-1.00, -0.50, 0.00, 0.50, 0.75, 1.0, 1.25, 1.5, 2.0, 2.5)	214 0.50	Front Surface central radius = 8.32	Volume between S curve and cornea (uL) = 2.812	Recommended diameter for lentic = 6.784	Ab, the long axis of the ellipse creating the base curve edge (below)	FOR SPHERICAL FRONTS target edge thickness below
♀	Delta R (mm) translation of 1st junction radially from BC origin (0.08-0.2/0.02)	0.14	True center thickness (mm) = 0.148	Volume between pretouch Landing Zone and cornea (uL) = 0.122	recommended radius of curve for lentic = 7.615	0.40	0.18
♀2	Delta R (mm) translation of 2nd junction radially from BC origin (0.1-0.22/0.02)	0.18	true offset between landing zones at J2 = 0.179	TOTAL VOLUME = 3.633(uL)	Origin for lentic curve is on y axis displaced from apex of front curve = 7.541	Af, the long axis of the ellipse creating the front curve edge (below)	SPHERICAL FRONTS- max thickness peripheral to J1 before lentic (in mm > Delta 2) see below
A	Angle of the landing zone (-25.5 to -50.0/.5)	-38.00	Present lens height (mm) above cornea at diameter of tangential touch = 0.038	Diameter where LZ would make tangential touch = 9.21	Estimated elevation at J2 = 0.040	0.40	0.01
D	selected lens diameter mm (8.0-12.9/0.1)	10.20	Diameter recommended from HVID = 10.2	Dia giving desired LZ lift = 10.53	fixed (tear thickness)	base to front at which the transition from base elipse to front elipse is found (below)	Minimum thickness peripheral to J1 before lentic (in mm > Delta 1) see below
SD	Selected depth of the S curve mm (.15-1.0/.05) (0.3-0.65/ .025) use next smaller than est.	1.116	Recommended depth (mm) S curve for desired correction @6u/D = 1.116 mm	Edge lift at selected diameter = 0.071	0.006	0.25	0.01

FIG - 19

FIG.-20

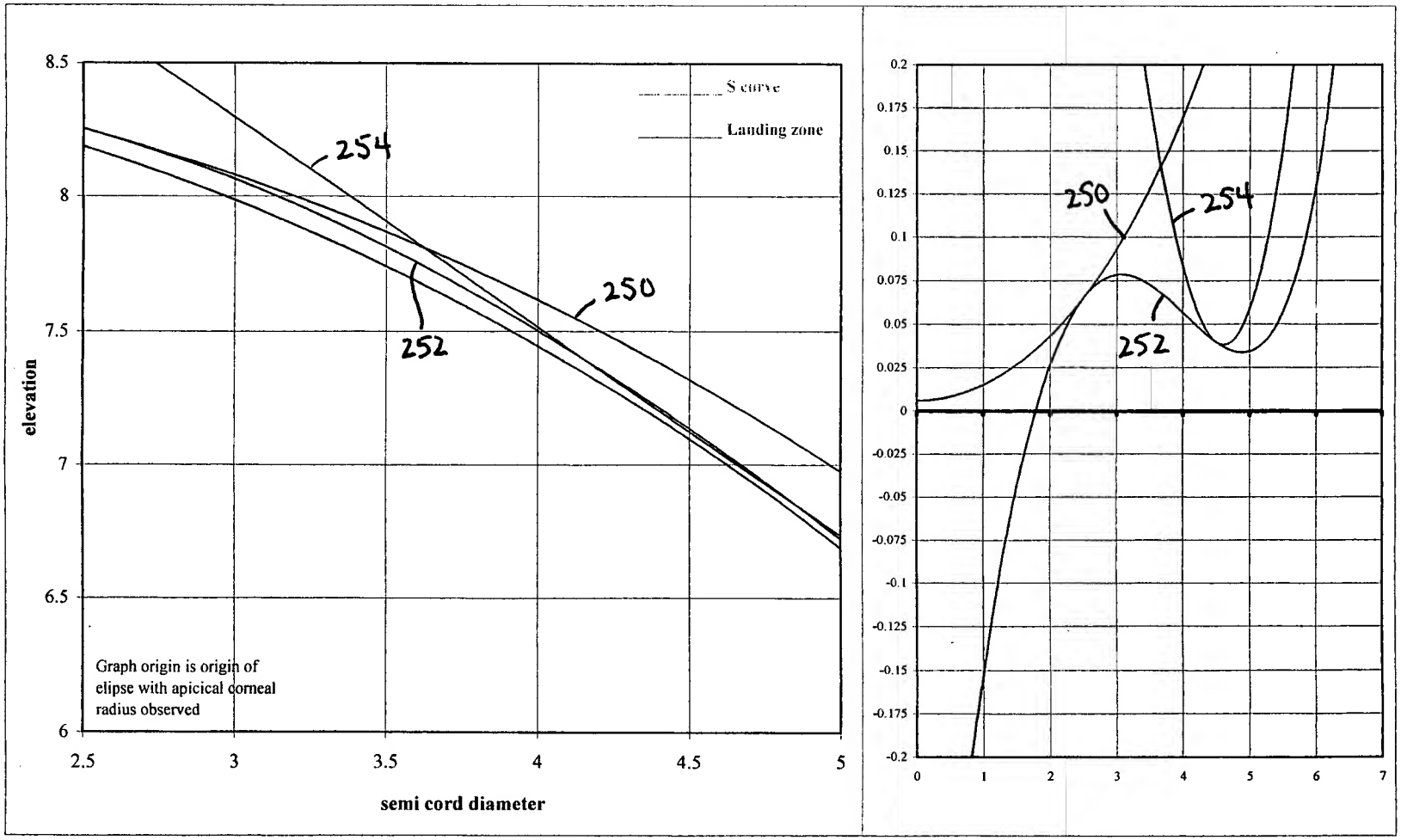

8.5
8
7.5
7
6.5
6
2.5
3
3.5
4
4.5
5
elevation
semi cord diameter
S curve
Landing zone
254
250
252
Graph origin is origin of elipse with apicical corneal radius observed
0.2
0.175
0.15
0.125
0.1
0.075
0.05
0.025
0
-0.025
-0.05
-0.075
-0.1
-0.125
-0.15
-0.175
-0.2
0
1
2
3
4
5
6
7
250
254
252

FIG.-21

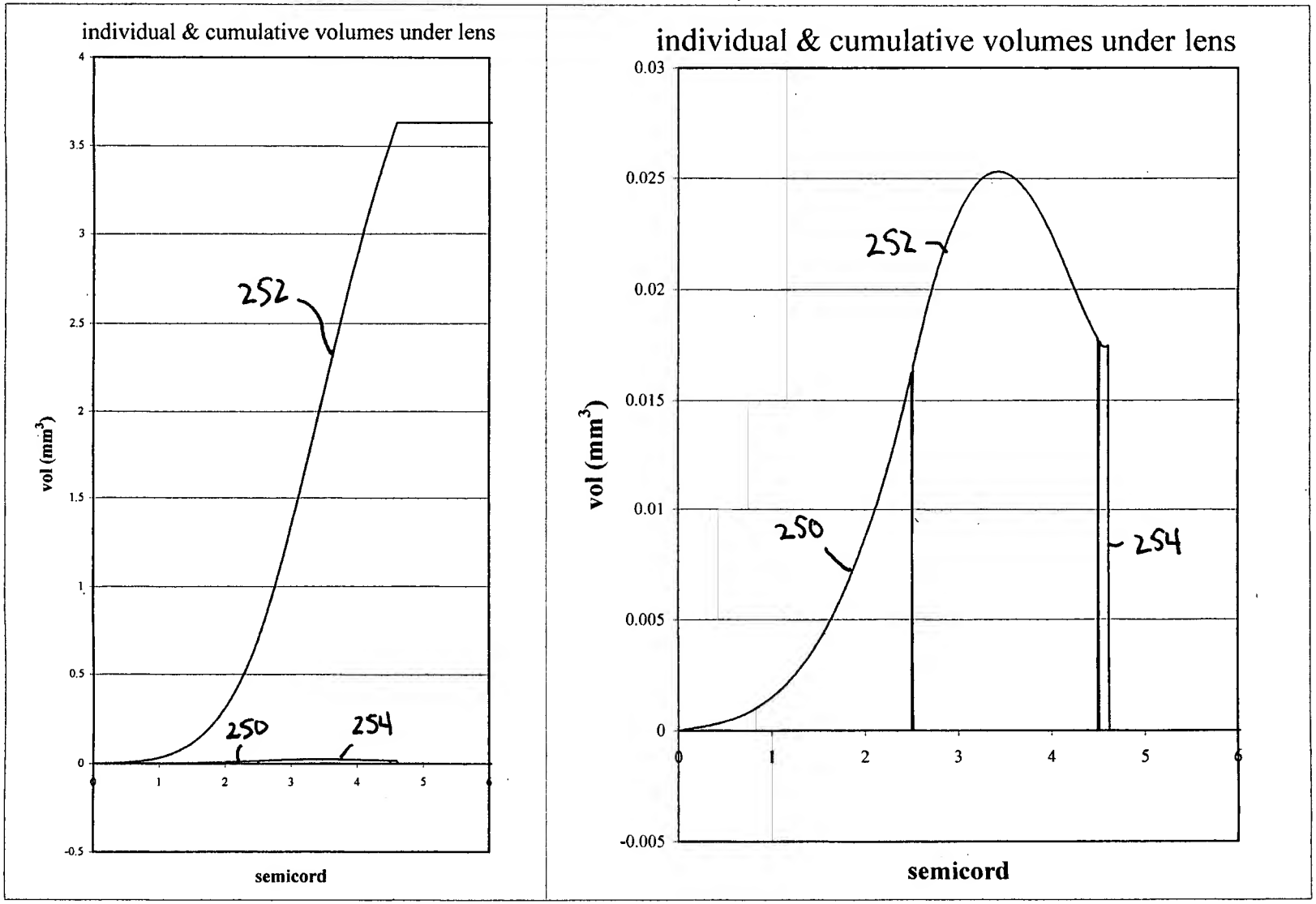

individual & cumulative volumes under lens
vol (mm3)
semicord
252
250
254
individual & cumulative volumes under lens
vol (mm3)
semicord
252
250
254

FIG.-22

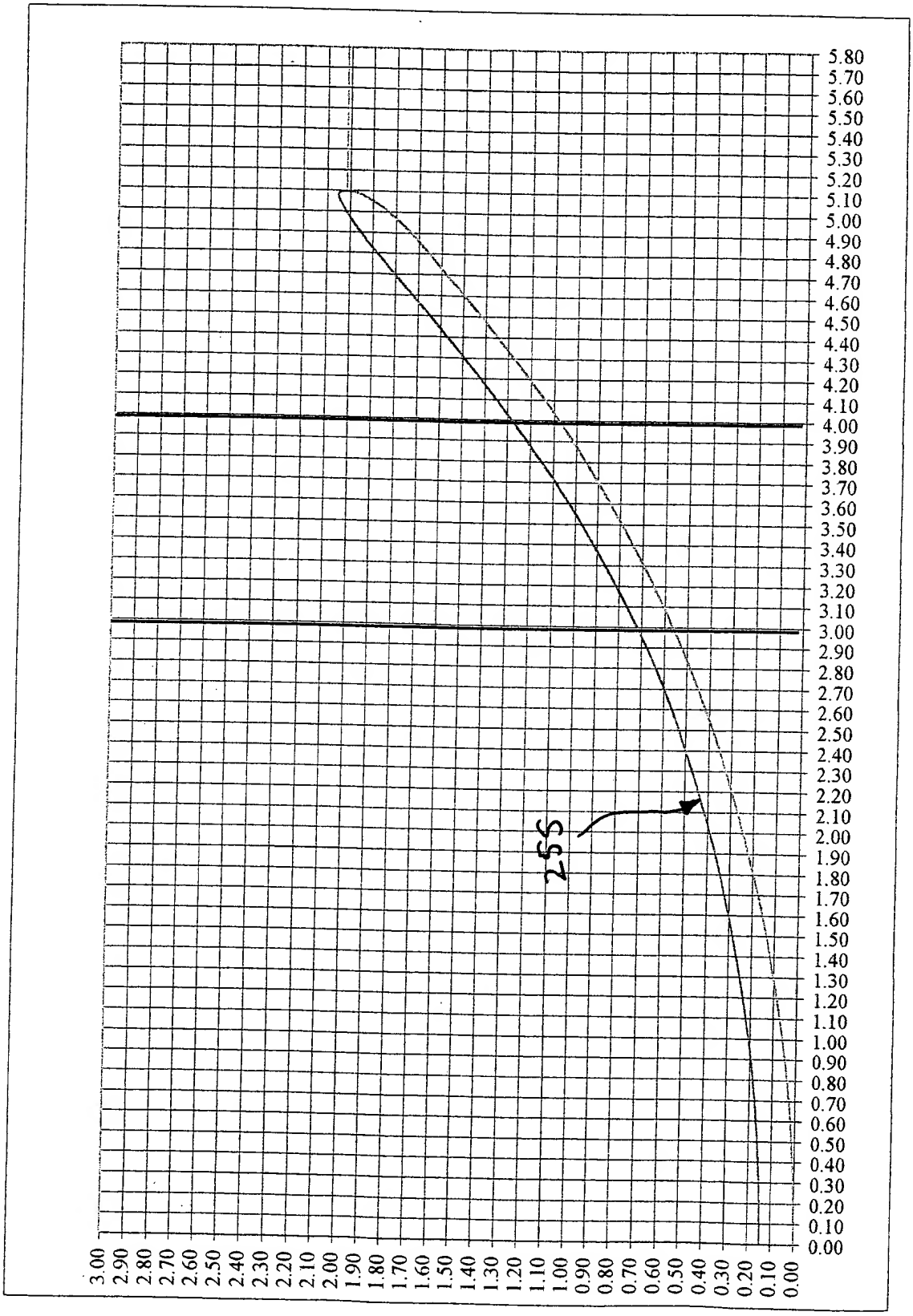
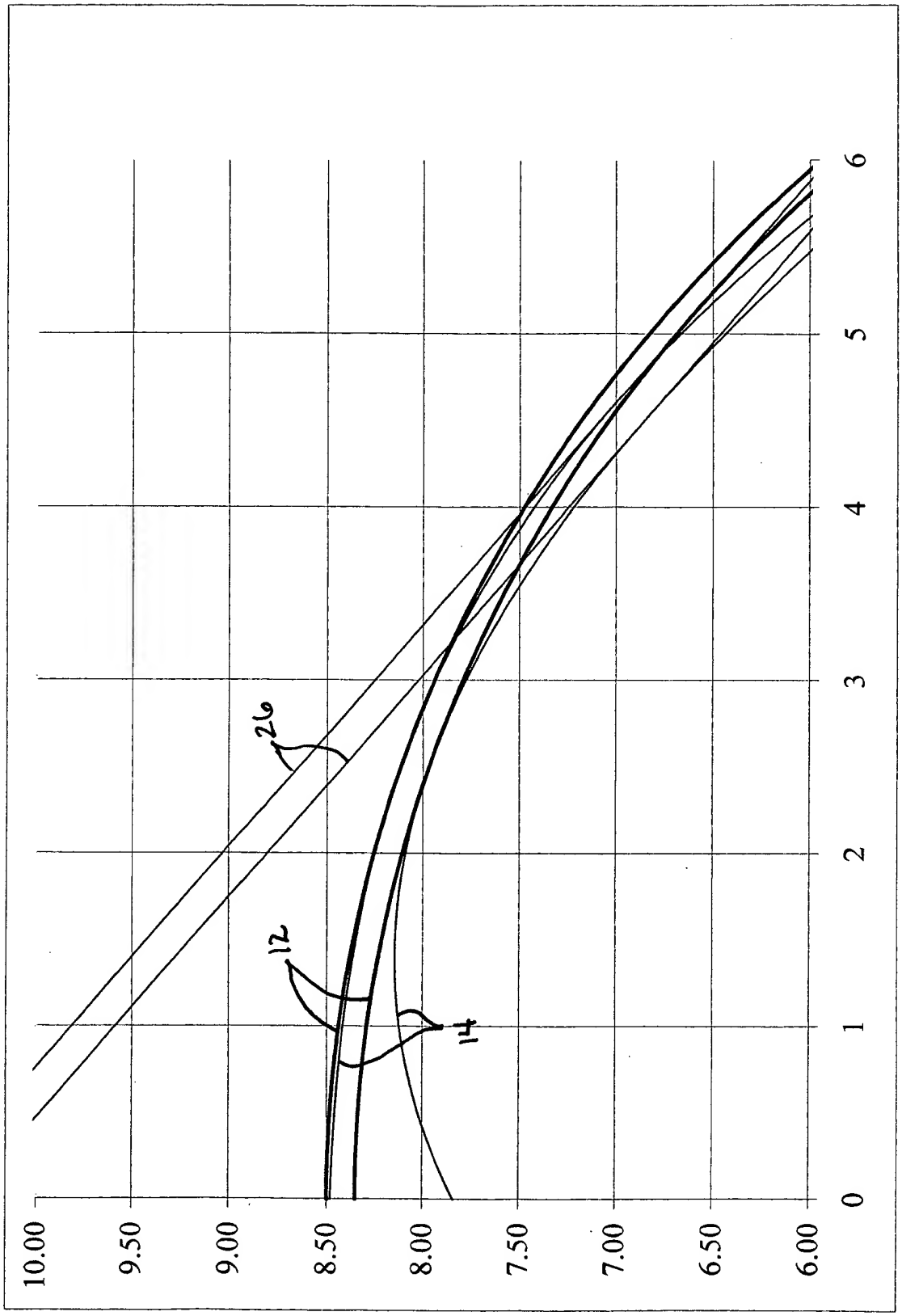

255
5.80
5.70
5.60
5.50
5.40
5.30
5.20
5.10
5.00
4.90
4.80
4.70
4.60
4.50
4.40
4.30
4.20
4.10
4.00
3.90
3.80
3.70
3.60
3.50
3.40
3.30
3.20
3.10
3.00
2.90
2.80
2.70
2.60
2.50
2.40
2.30
2.20
2.10
2.00
1.90
1.80
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
3.00
2.90
2.80
2.70
2.60
2.50
2.40
2.30
2.20
2.10
2.00
1.90
1.80
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00

FIG.-23



BC	Selected bc (6.9-10.4/0.1) (7.70-9.1/.05)	9.30	Suggested Base Curve is 9.3				
J1	Radial distance (OZ/2) from the lens center to 1st junction mm (1.0-5.9/0.1)	3.00	4B	corneal apical radius (mm)	lens / cornea power (D) difference wanted	ellipticity of the cornea	HVID (mm)
SW	Width of the S curve mm (.75,1)	1.00	EYE	8.13	-5.25	0.3	11.9
MAT	Lens material (FP30, FP60, FP92, FP151, HDS, Other)	HDS	Ref. Index of material used = 1.449 If 'other' was selected input RI in Cell H4	Volume between BC and cornea (uL) = 1.213	Actual power (D) difference between bc and apical cornea = -5.22	Desired edge lift (mm) when landed at full Diameter = 0.0875	1.45
P	lens power desired (-1.00, -0.50, 0.00, 0.50, 0.75, 1.0, 1.25, 1.5, 2.0, 2.5)	0.50	Front Surface central radius = 9.24	Volume between S curve and cornea (uL) = 2.389	Recommended diameter for lentic = 9.791	Ab, the long axis of the ellipse creating the base curve edge (below) 243	FOR SPHERICAL FRONTS target edge thickness below
	Delta R (mm) translation of 1st junction radially from BC origin (0.08-0.2/0.02)	222 0.08	True center thickness (mm) = 0.088	Volume between pretouch Landing Zone and cornea (uL) = 1.360	recommended radius of curve for lentic = 10.059	2.00	0.18
P2	Delta R (mm) translation of 2nd junction radially from BC origin (0.1-0.22/0.02)	242 0.22	true offset between landing zones at J2 = 0.217	TOTAL VOLUME = 4.963(uL)	Origin for lentic curve is on y axis displaced from apex of front curve = 10.191	Af, the long axis of the ellipse creating the front curve edge (below) 244	SPHERICAL FRONTS- max thickness peripheral to J1 before lentic (in mm > Delta 2) see below
A	Angle of the landing zone (-25.5 to -50.0/.5)	-35.00	Present lens height (mm) above cornea at diameter of tangential touch = 0.050	Diameter where LZ would make tangential touch = 9.47	Estimated elevation at J2 = 0.106	2.00	0.01
D	selected lens diameter mm (8.0-12.9/0.1)	209 10.90	Diameter recommended from HVID = 10.9	Dia giving desired LZ lift = 10.69	fixed (tear thickness)	base to front at which the transition from base elipse to front elipse is found (below) 245	Minimum thickness peripheral to J1 before lentic (in mm > Delta 1) see below
SD	Selected depth of the S curve mm (.15-1.0/.05) (0.3-0.65/ .025) use next smaller than est.	0.450	Recommended depth (mm) S curve for desired correction @6u/D = 0.462 mm	Edge lift at selected diameter = 0.107	0.006	0.40	0.01

FIG-24

FIG.-25

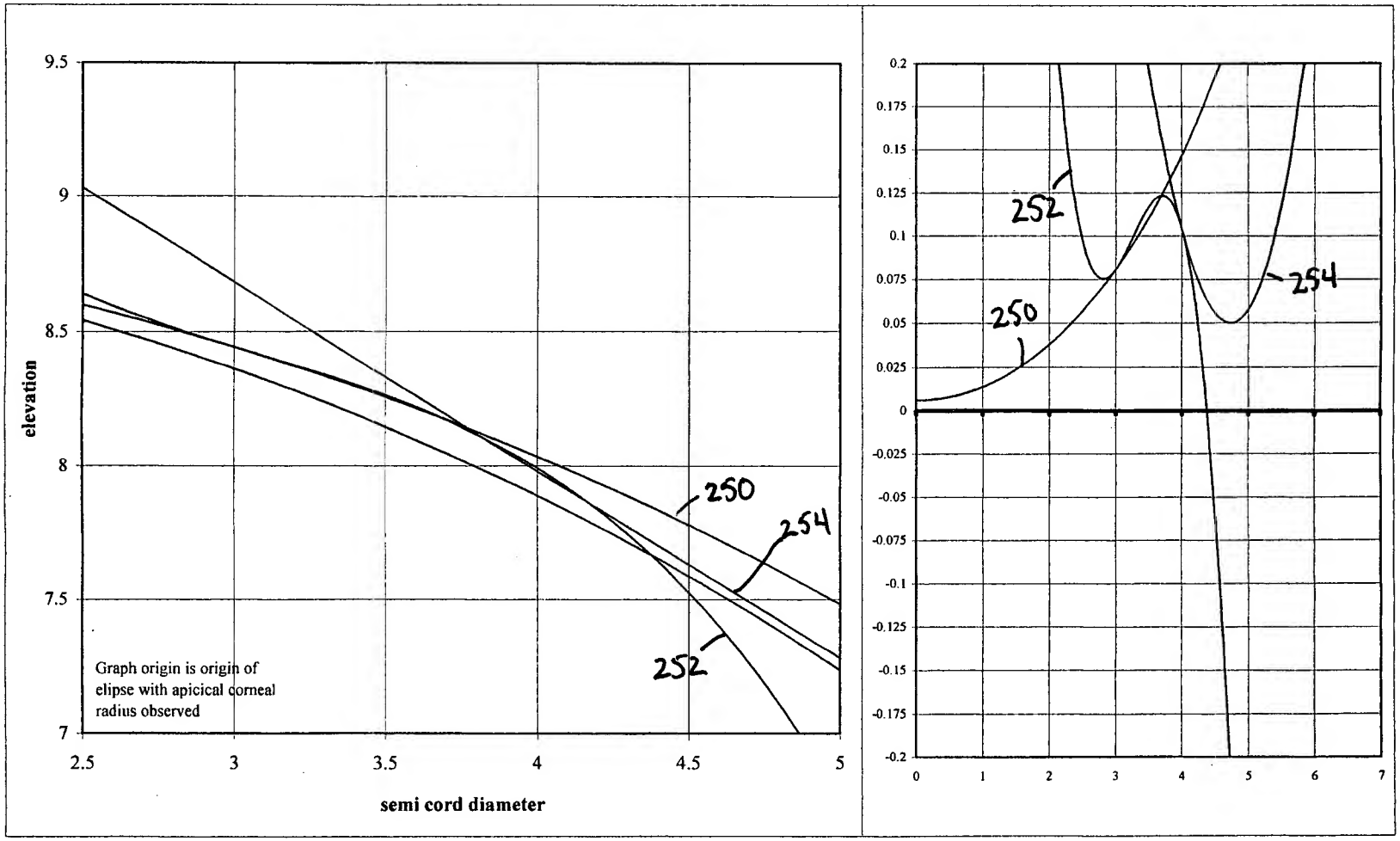

9.5
9
8.5
8
7.5
7
elevation
2.5
3
3.5
4
4.5
5
semi cord diameter
Graph origin is origin of elipse with apicical corneal radius observed
250
254
252
0.2
0.175
0.15
0.125
0.1
0.075
0.05
0.025
0
-0.025
-0.05
-0.075
-0.1
-0.125
-0.15
-0.175
-0.2
0
1
2
3
4
5
6
7
252
254
250

FIG.-26

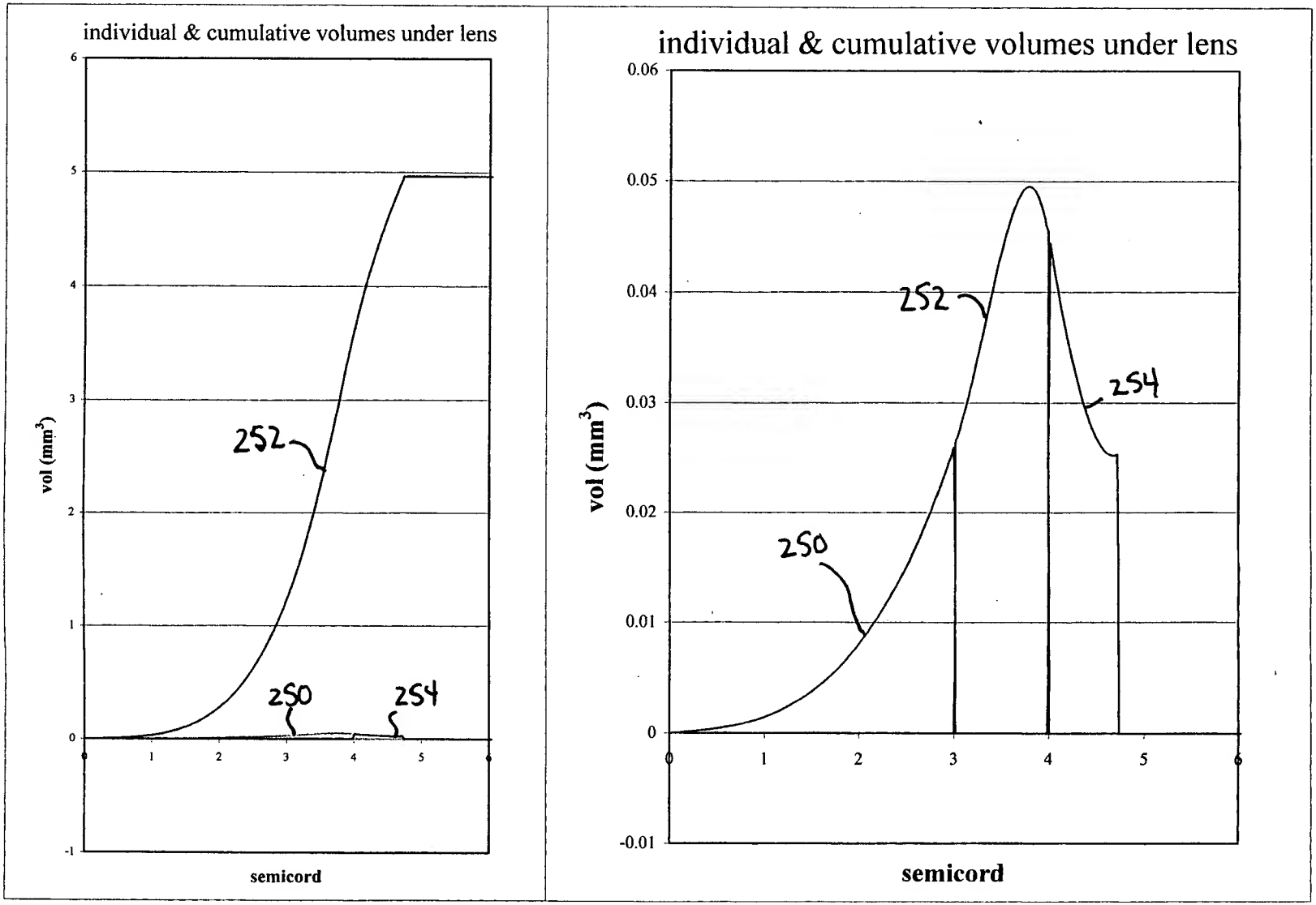

individual & cumulative volumes under lens
vol (mm3)
semicord
252
250
254
individual & cumulative volumes under lens
vol (mm3)
semicord
252
254
250

FIG.-27

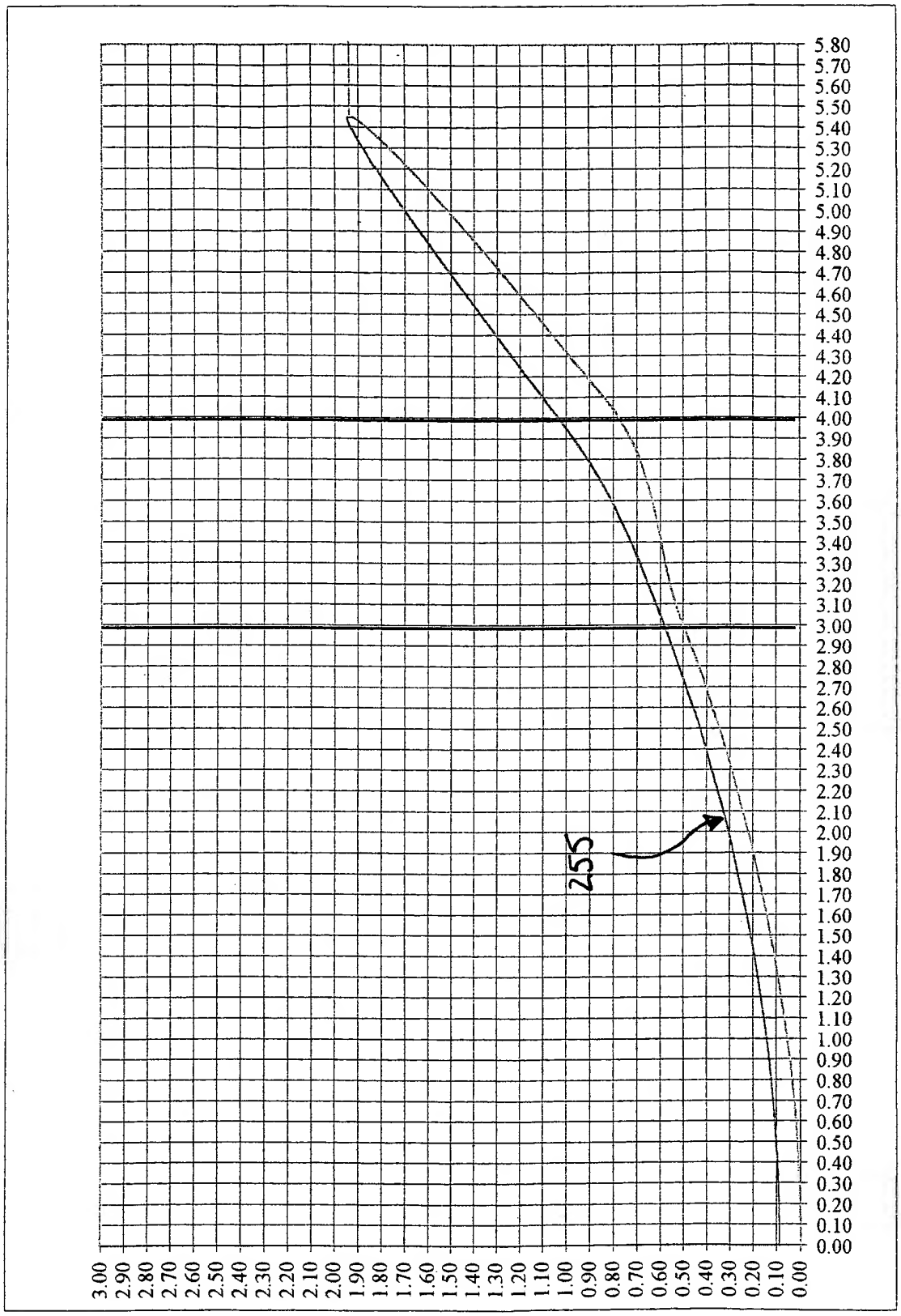
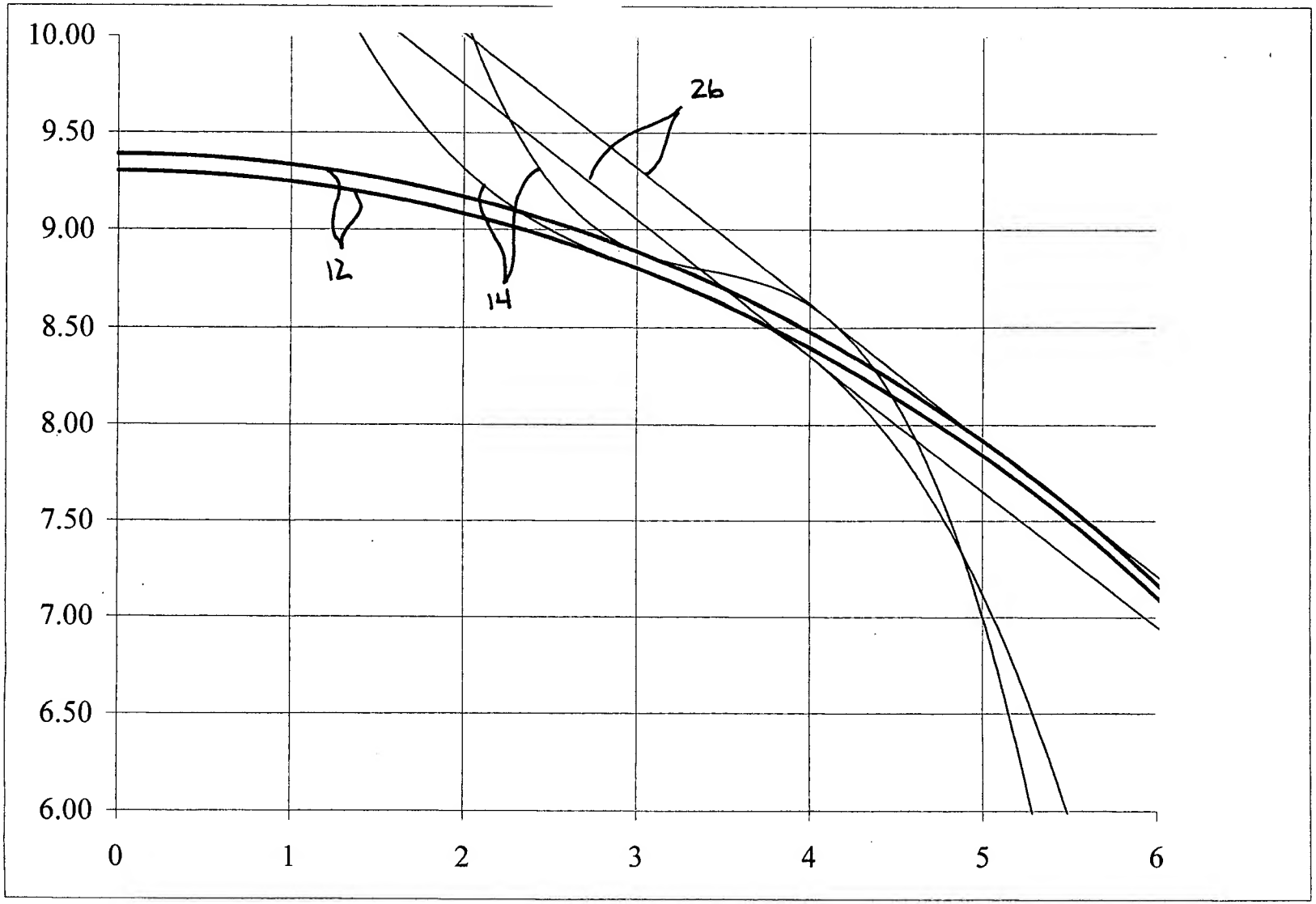
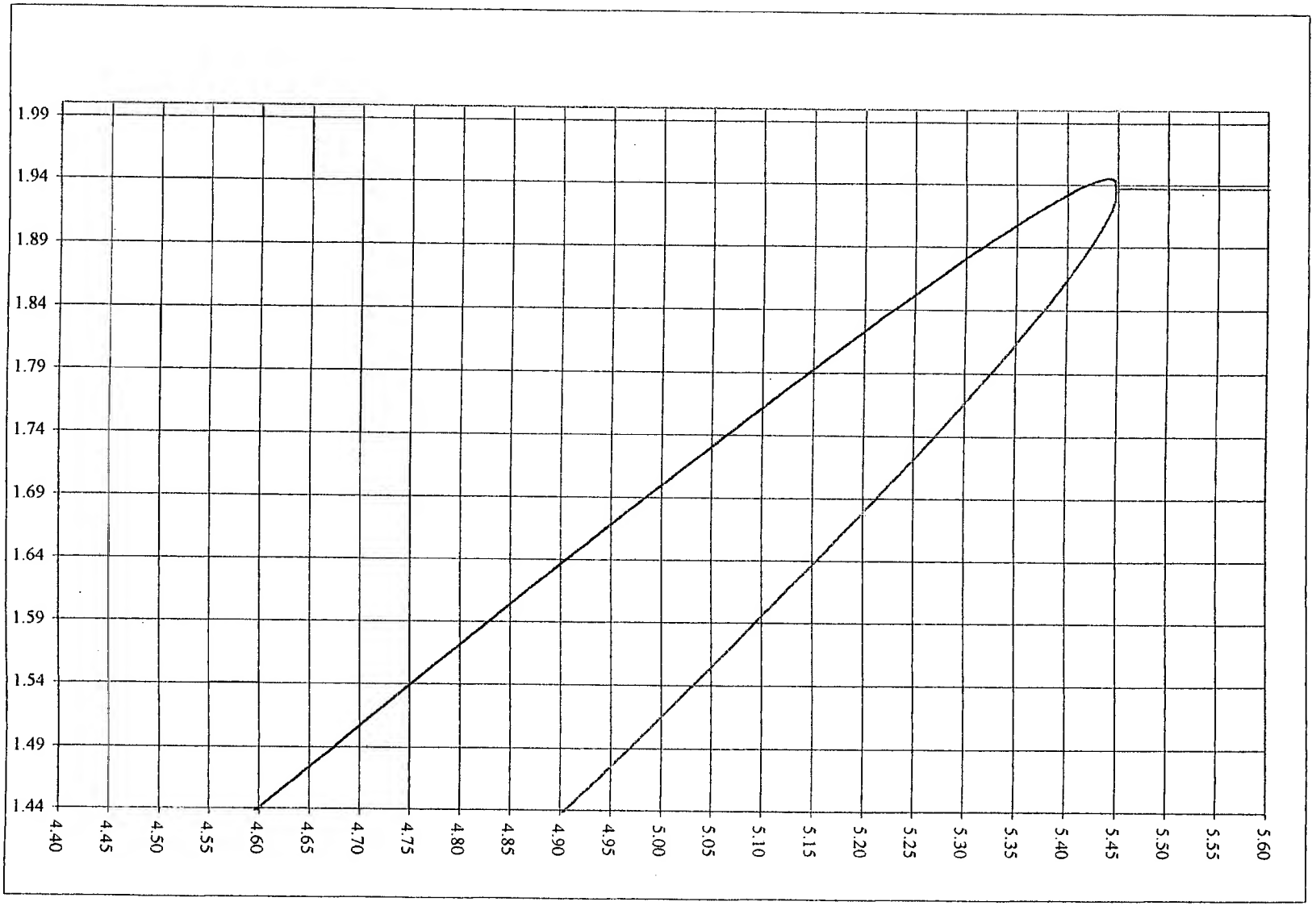

255
5.80
5.70
5.60
5.50
5.40
5.30
5.20
5.10
5.00
4.90
4.80
4.70
4.60
4.50
4.40
4.30
4.20
4.10
4.00
3.90
3.80
3.70
3.60
3.50
3.40
3.30
3.20
3.10
3.00
2.90
2.80
2.70
2.60
2.50
2.40
2.30
2.20
2.10
2.00
1.90
1.80
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
3.00
2.90
2.80
2.70
2.60
2.50
2.40
2.30
2.20
2.10
2.00
1.90
1.80
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00

FIG.-28



T0Z690 T5Eh6B6D

FIG.-29



BC	Selected bc (6.9-10.4/0.1) (7.70-9.1/.05)	8.40	Suggested Base Curve is 8.4				
J1	Radial distance (OZ/2) from the lens center to 1st junction mm (1.0-5.9/0.1)	3.00	5B	corneal apical radius (mm)	lens / cornea power (D) difference wanted	ellipticity of the cornea	HVID (mm)
SW	Width of the S curve mm (.75,1)	1.00	EYE	7.75	-3.50	0.7	11
MAT	Lens material (FP30, FP60, FP92, FP151, HDS, Other)	HDS	Ref. Index of material used = 1.449 If 'other' was selected input RI in Cell H4	Volume between BC and cornea (uL) = 0.748	Actual power (D) difference between bc and apical cornea = -3.37	Desired edge lift (mm) when landed at full Diameter = 0.077	1.45
P	lens power desired (-1.00, -0.50, 0.00, 0.50, 0.75, 1.0, 1.25, 1.5, 2.0, 2.5)	0.50	Front Surface central radius = 8.36	Volume between S curve and cornea (uL) = 1.195	Recommended diameter for lentic = 7.735	Ab, the long axis of the ellipse creating the base curve edge (below)	FOR SPHERICAL FRONTS target edge thickness below
J1	Delta R (mm) translation of 1st junction radially from BC origin (0.08-0.2/0.02)	222 0.10	True center thickness (mm) = 0.110	Volume between pretouch Landing Zone and cornea (uL) = 0.439	recommended radius of curve for lentic = 9.295	0.40	0.18
J2	Delta R (mm) translation of 2nd junction radially from BC origin (0.1-0.22/0.02)	242 0.10	true offset between landing zones at J2 = 0.100	TOTAL VOLUME = 2.382(uL)	Origin for lentic curve is on y axis displaced from apex of front curve = 9.400	Af, the long axis of the ellipse creating the front curve edge (below)	SPHERICAL FRONTS- max thickness peripheral to J1 before lentic (in mm > Delta 2) see below
A	Angle of the landing zone (-25.5 to -50.0/.5)	-32.50	Present lens height (mm) above cornea at diameter of tangential touch = 0.027	Diameter where LZ would make tangential touch = 8.99	Estimated elevation at J2 = 0.047	0.40	0.01
D	selected lens diameter mm (8.0-12.9/0.1)	10.00	Diameter recommended from HVID = 10	Dia giving desired LZ lift = 10.59	fixed (tear thickness)	base to front at which the transition from base elipse to front elipse is found (below)	Minimum thickness peripheral to J1 before lentic (in mm > Delta 1) see below
SD	Selected depth of the S curve mm (.15-1.0/.05) (0.3-0.65/ .025) use next smaller than est.	0.475	Recommended depth (mm) S curve for desired correction @6u/D = 0.478 mm	Edge lift at selected diameter = 0.048	0.006	0.25	0.01

FIG-30

FIG.-31

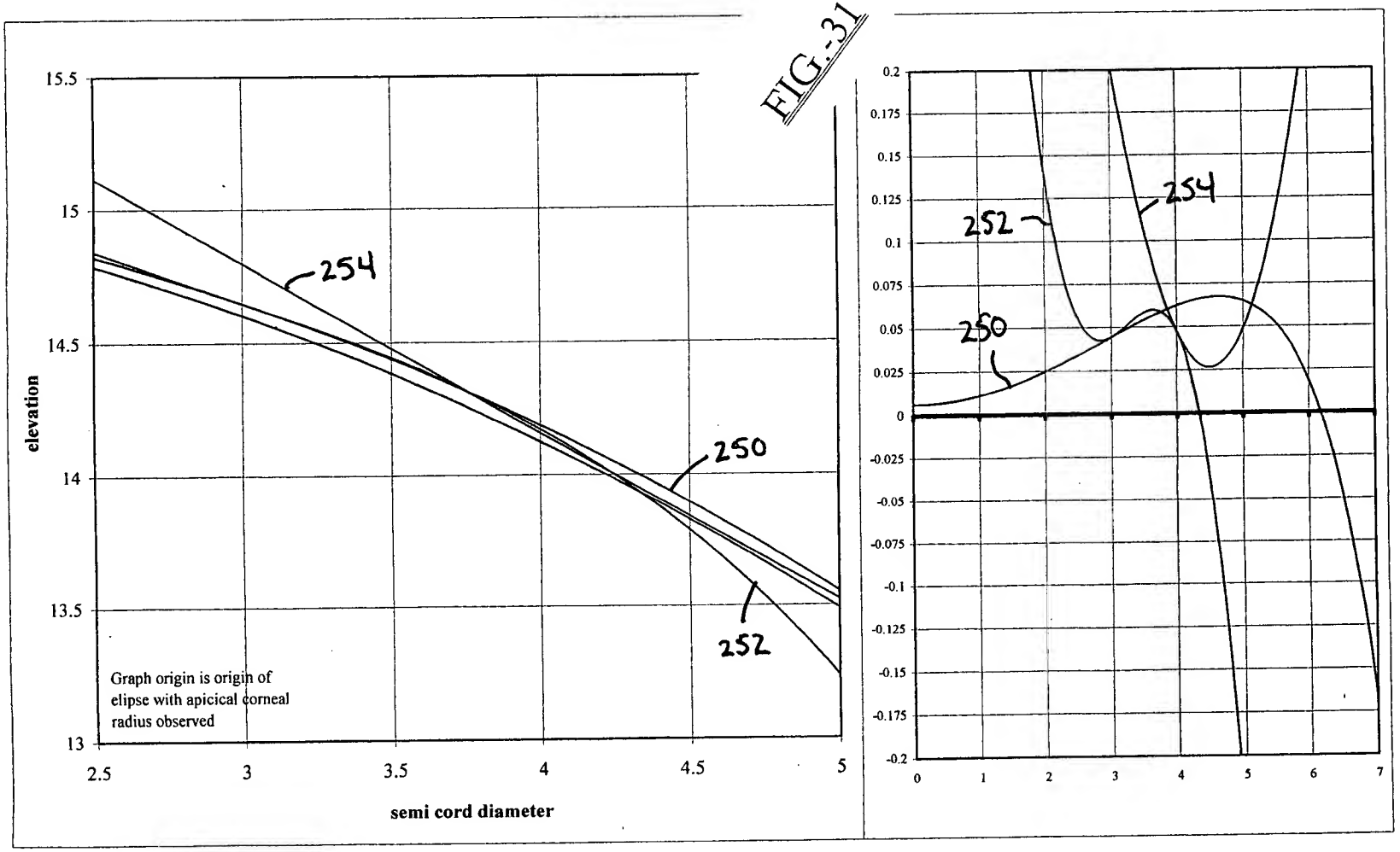

15.5
15
14.5
14
13.5
13
elevation
2.5
3
3.5
4
4.5
5
semi cord diameter
254
250
252
Graph origin is origin of elipse with apicical corneal radius observed
0.2
0.175
0.15
0.125
0.1
0.075
0.05
0.025
0
-0.025
-0.05
-0.075
-0.1
-0.125
-0.15
-0.175
-0.2
0
1
2
3
4
5
6
7
252
254
250

FIG.-32

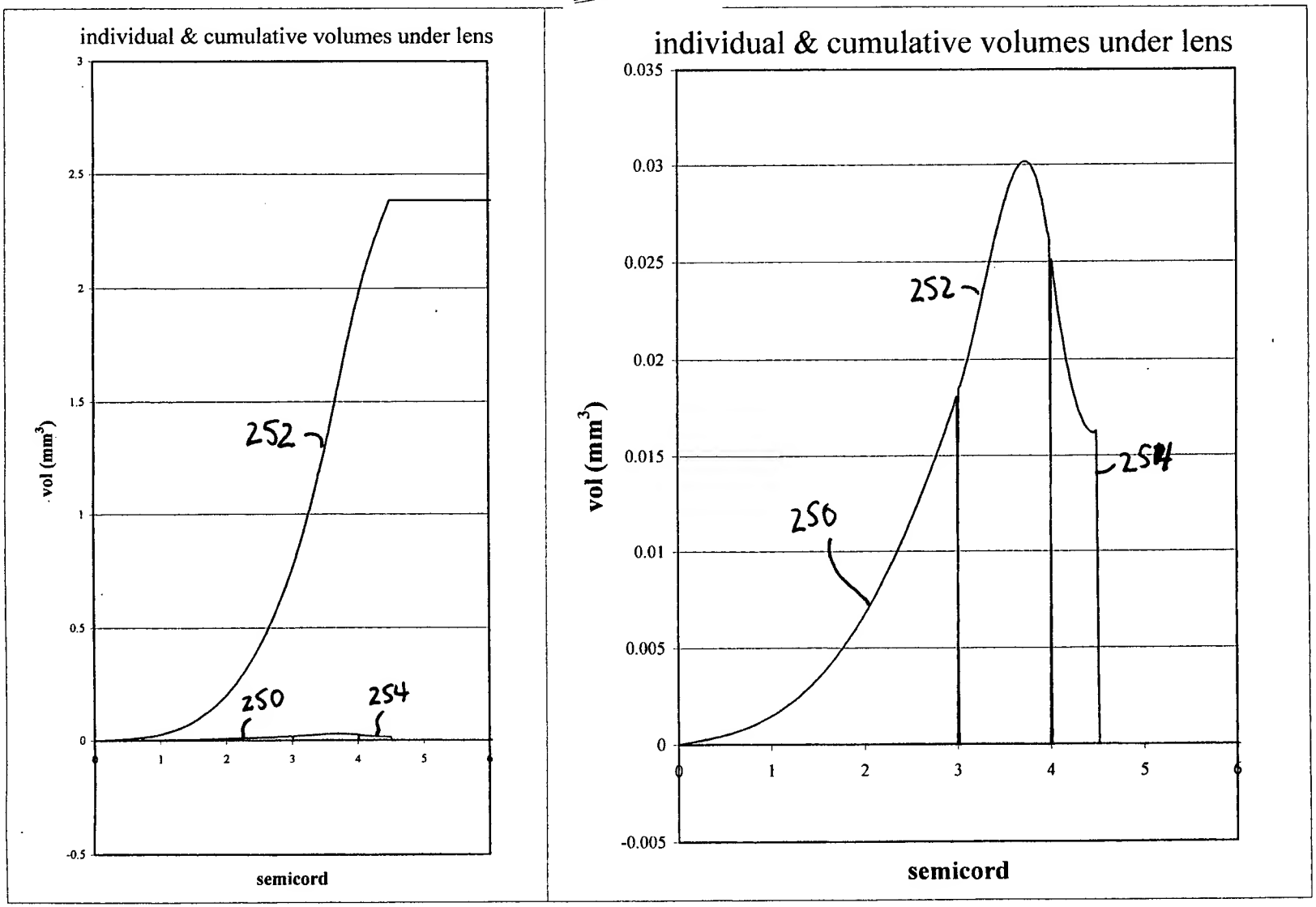

individual & cumulative volumes under lens
vol (mm3)
semicord
252
250
254
individual & cumulative volumes under lens
vol (mm3)
semicord
252
250
254

FIG.-33

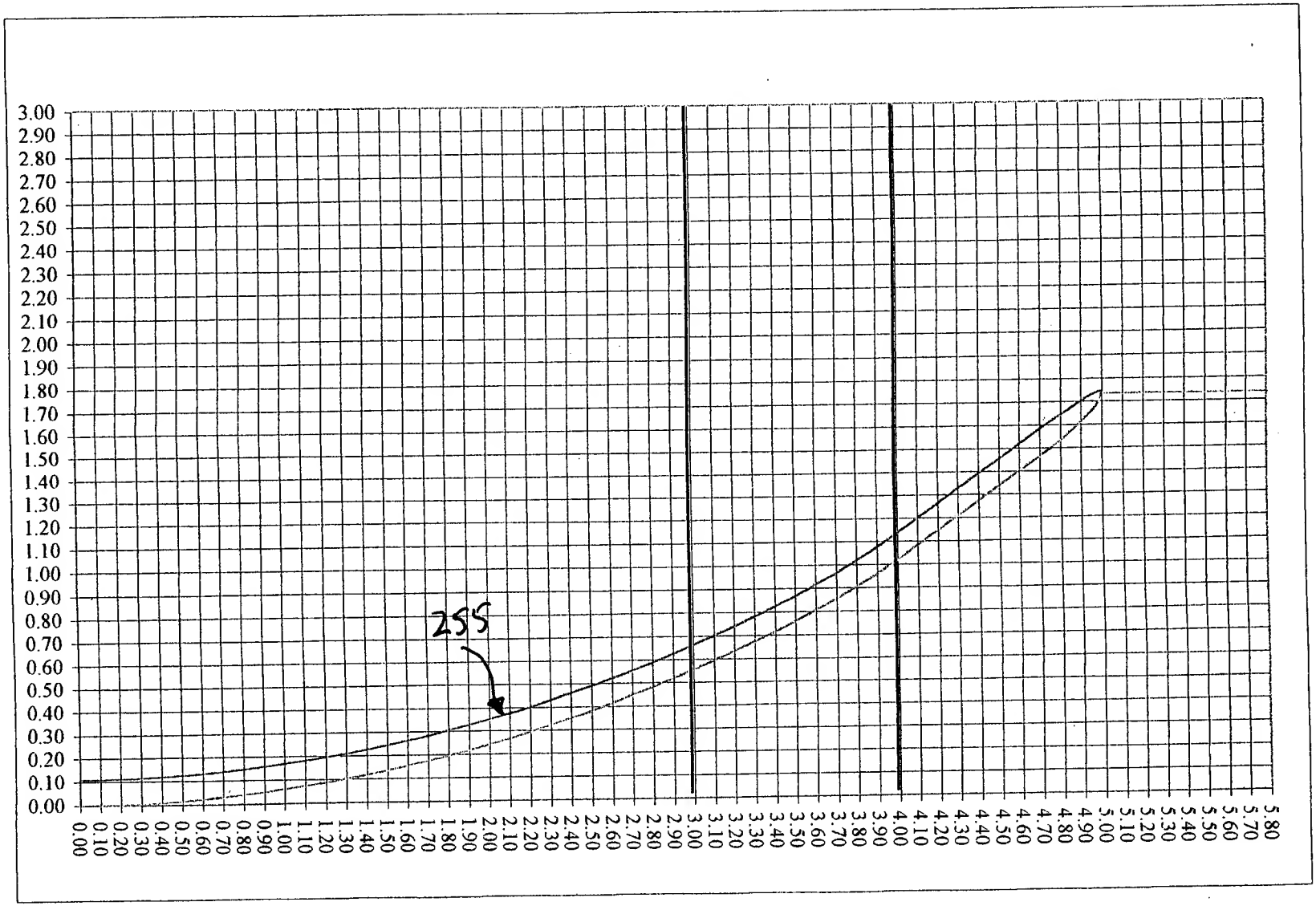
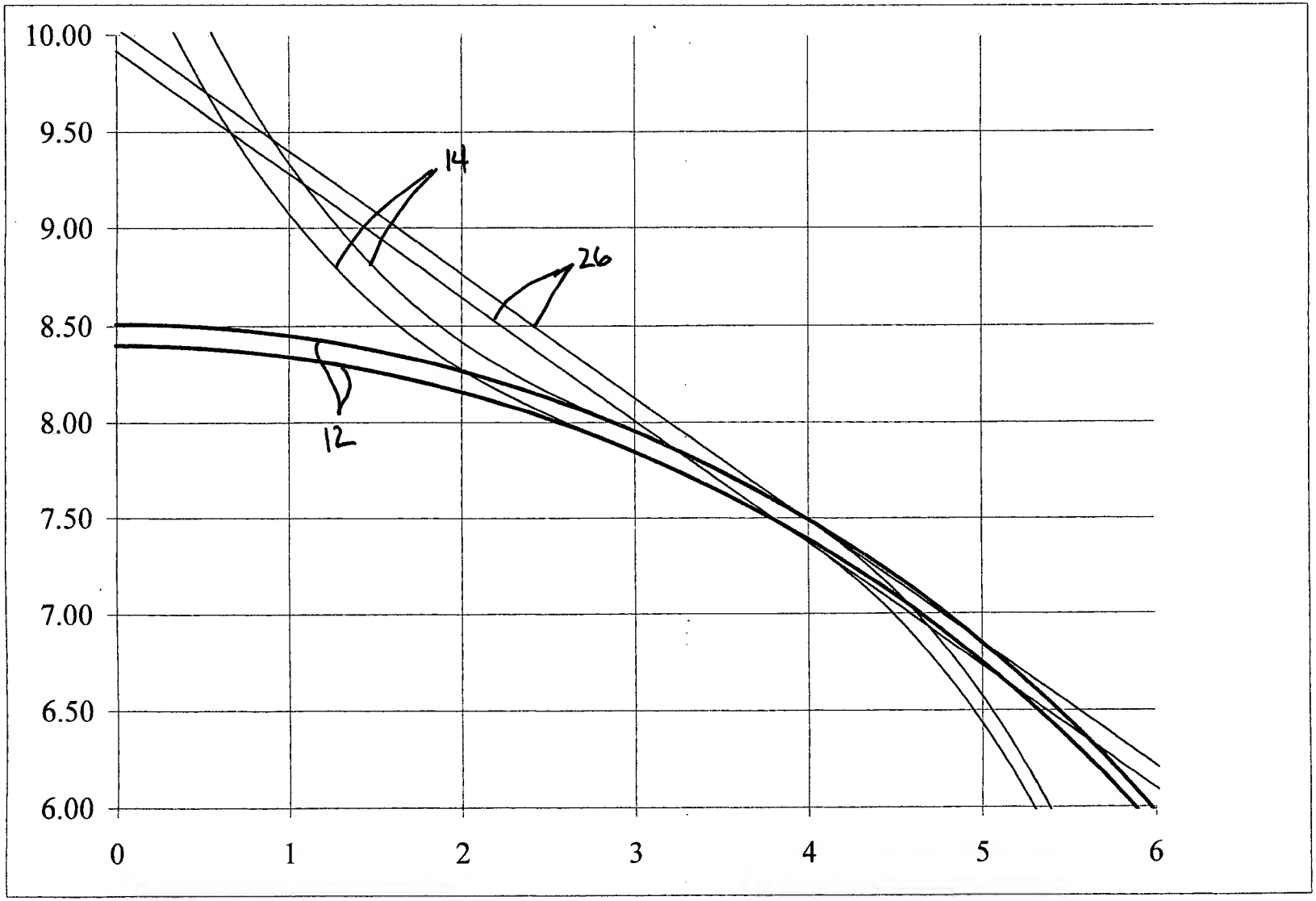

255
3.00
2.90
2.80
2.70
2.60
2.50
2.40
2.30
2.20
2.10
2.00
1.90
1.80
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0.00 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00 1.10 1.20 1.30 1.40 1.50 1.60 1.70 1.80 1.90 2.00 2.10 2.20 2.30 2.40 2.50 2.60 2.70 2.80 2.90 3.00 3.10 3.20 3.30 3.40 3.50 3.60 3.70 3.80 3.90 4.00 4.10 4.20 4.30 4.40 4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20 5.30 5.40 5.50 5.60 5.70 5.80

FIG.-34



BC	Selected bc (6.9-10.4/0.1) (7.70-9.1/.05)	7.50	Suggested Base Curve is 7.5		200		
J1	Radial distance (OZ/2) from the lens center to 1st junction mm (1.0-5.9/0.1) 208	2.50	5B	corneal apical radius (mm)	lens / cornea power (D) difference wanted	ellipticity of the cornea	HVID (mm)
SW	Width of the S curve mm (.75,1)	1.50	EYE	7.8	2.00	0.3	11.9
MAT	Lens material (FP30, FP60, FP92, FP151, HDS, Other) 210	HDS	Ref. Index of material used = 1.449 If 'other' was selected input RI in Cell H4	Volume between BC and cornea (uL) = 0.298	Actual power (D) difference between bc and apical cornea = 1.73	Desired edge lift (mm) when landed at full Diameter = 0.062	1.45
P	lens power desired (-1.00, -0.50, 0.00, 0.50, 0.75, 1.0, 1.25, 1.5, 2.0, 2.5)	0.50	Front Surface central radius = 7.49	Volume between S curve and cornea (uL) = 1.383	Recommended diameter for lentic = 5.737	Ab, the long axis of the ellipse creating the base curve edge (below)	FOR SPHERICAL FRONTS target edge thickness below
	Delta R (mm) translation of 1st junction radially from BC origin (0.08-0.2/0.02)	0.14	True center thickness (mm) = 0.149	Volume between pretouch Landing Zone and cornea (uL) = 0.491 246	recommended radius of curve for lentic = 8.482	0.40	0.18
?2	Delta R (mm) translation of 2nd junction radially from BC origin (0.1-0.22/0.02)	0.18	true offset between landing zones at J2 = 0.180	TOTAL VOLUME = 2.171(uL)	Origin for lentic curve is on y axis displaced from apex of front curve = 8.553	Af, the long axis of the ellipse creating the front curve edge (below)	SPHERICAL FRONTS- max thickness peripheral to J1 before lentic (in mm > Delta 2) see below
A	Angle of the landing zone (-25.5 to -50.0/.5)	-35.00	Present lens height (mm) above cornea at diameter of tangential touch = 0.024	Diameter where LZ would make tangential touch = 9.08	Estimated elevation at J2 = 0.056	0.40	0.01
D	selected lens diameter mm (8.0-12.9/0.1)	10.00	244 Diameter recommended from HVID = 10.9	Dia giving desired LZ lift = 10.52	fixed (tear thickness)	base to front at which the transition from base elipse to front elipse is found (below)	Minimum thickness peripheral to J1 before lentic (in mm > Delta 1) see below
SD	Selected depth of the S curve mm (.15-1.0/.05) (0.3-0.65/ .025) use next smaller than est.	0.636	Recommended depth (mm) S curve for desired correction @6u/D = 0.646 mm	Edge lift at selected diameter = 0.047	0.024	0.25	0.01

FIG-35

FIG.-36

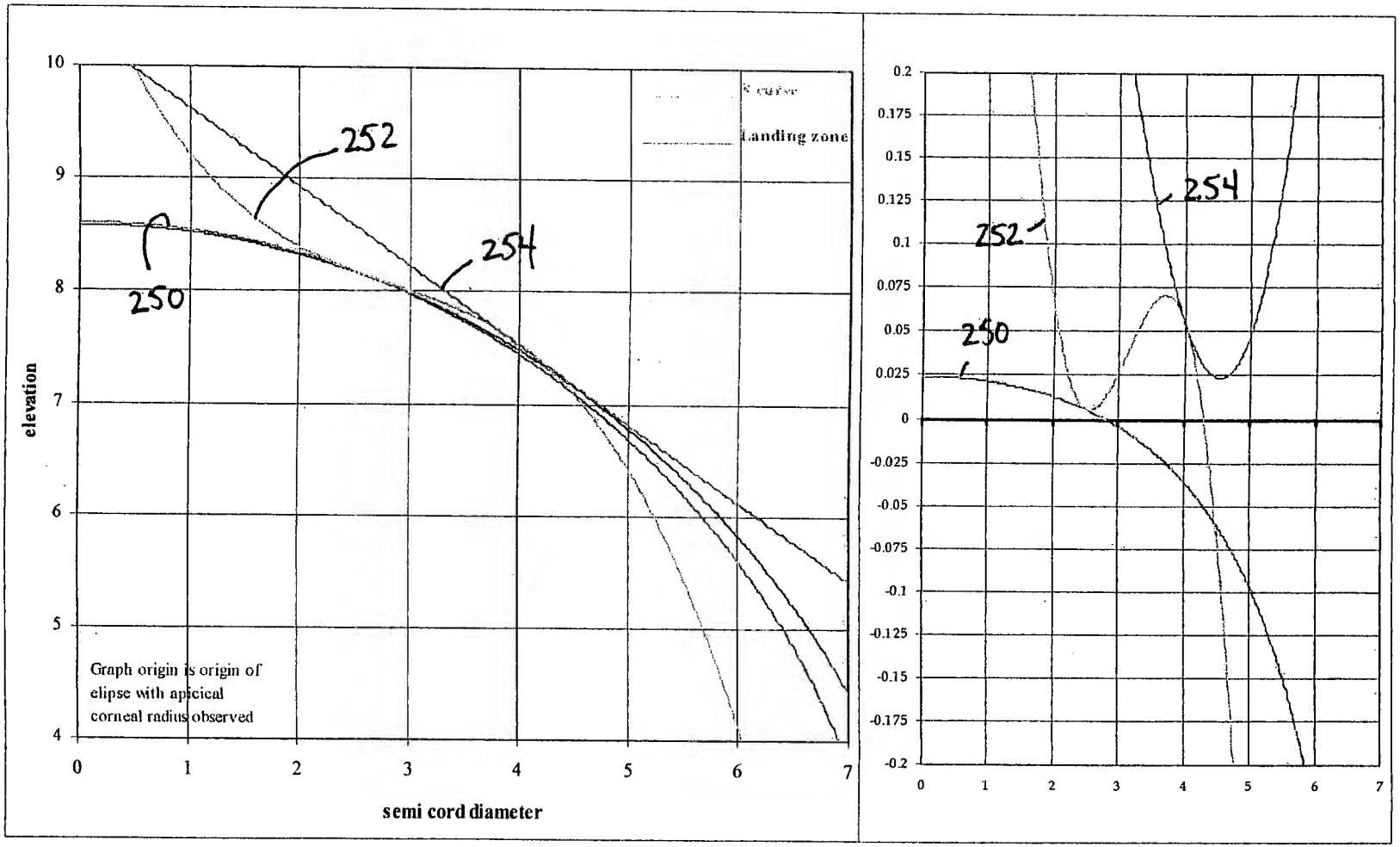
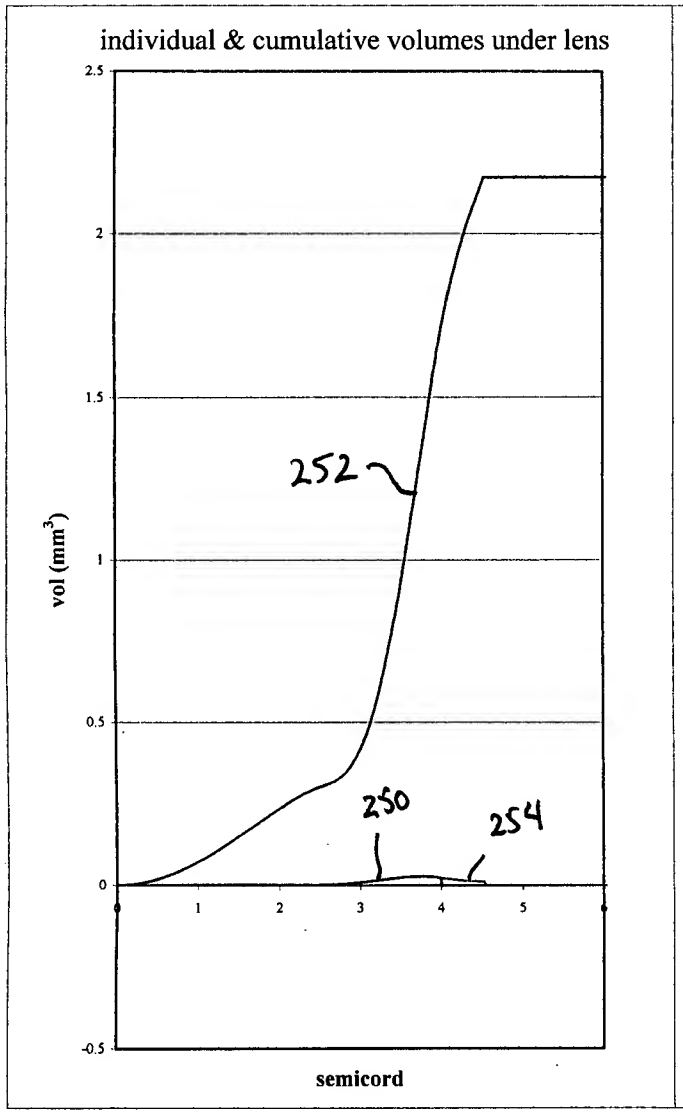

10
9
8
7
6
5
4
elevation
0
1
2
3
4
5
6
7
semi cord diameter
Landing zone
252
254
250
Graph origin is origin of elipse with apical corneal radius observed
0.2
0.175
0.15
0.125
0.1
0.075
0.05
0.025
0
-0.025
-0.05
-0.075
-0.1
-0.125
-0.15
-0.175
-0.2
254
252
250

FIG.-37


individual & cumulative volumes under lens
vol (mm3)
semicord
252
250
254

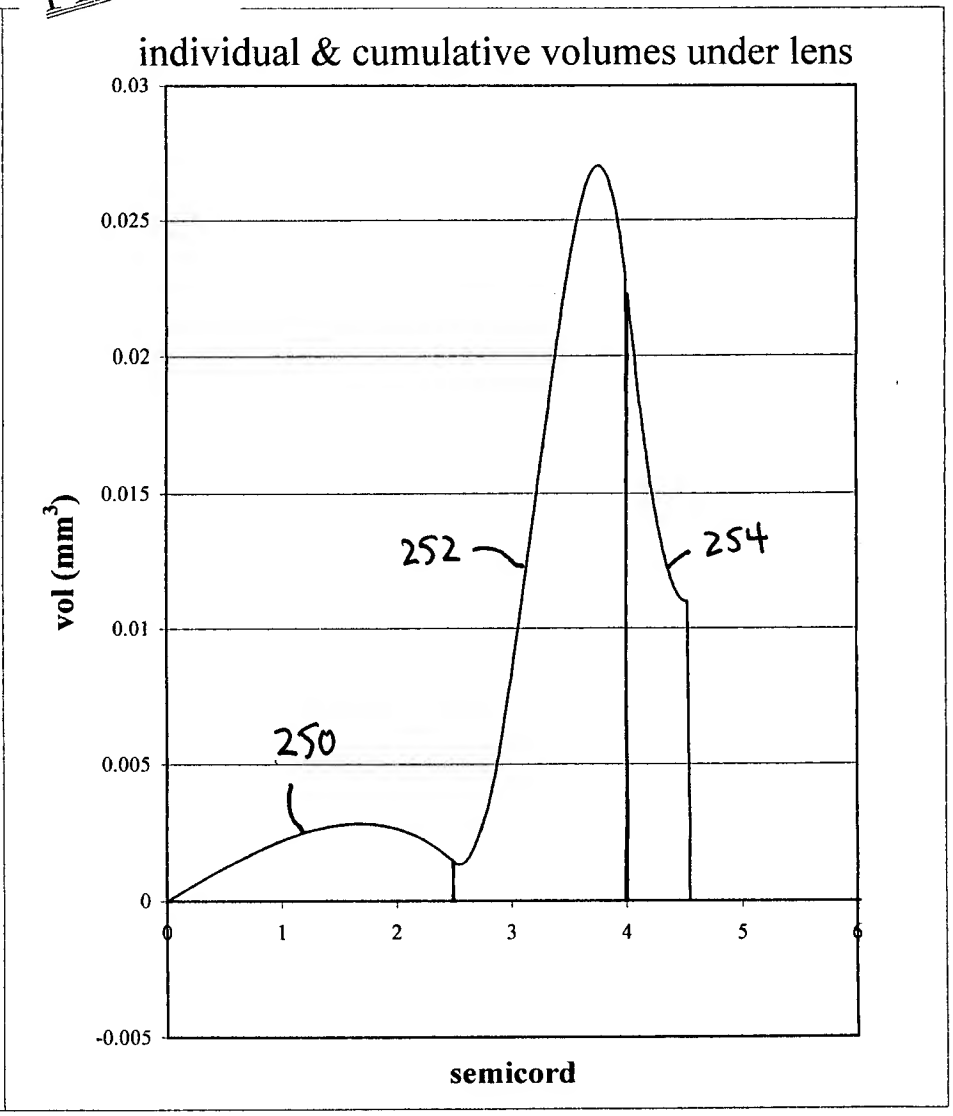
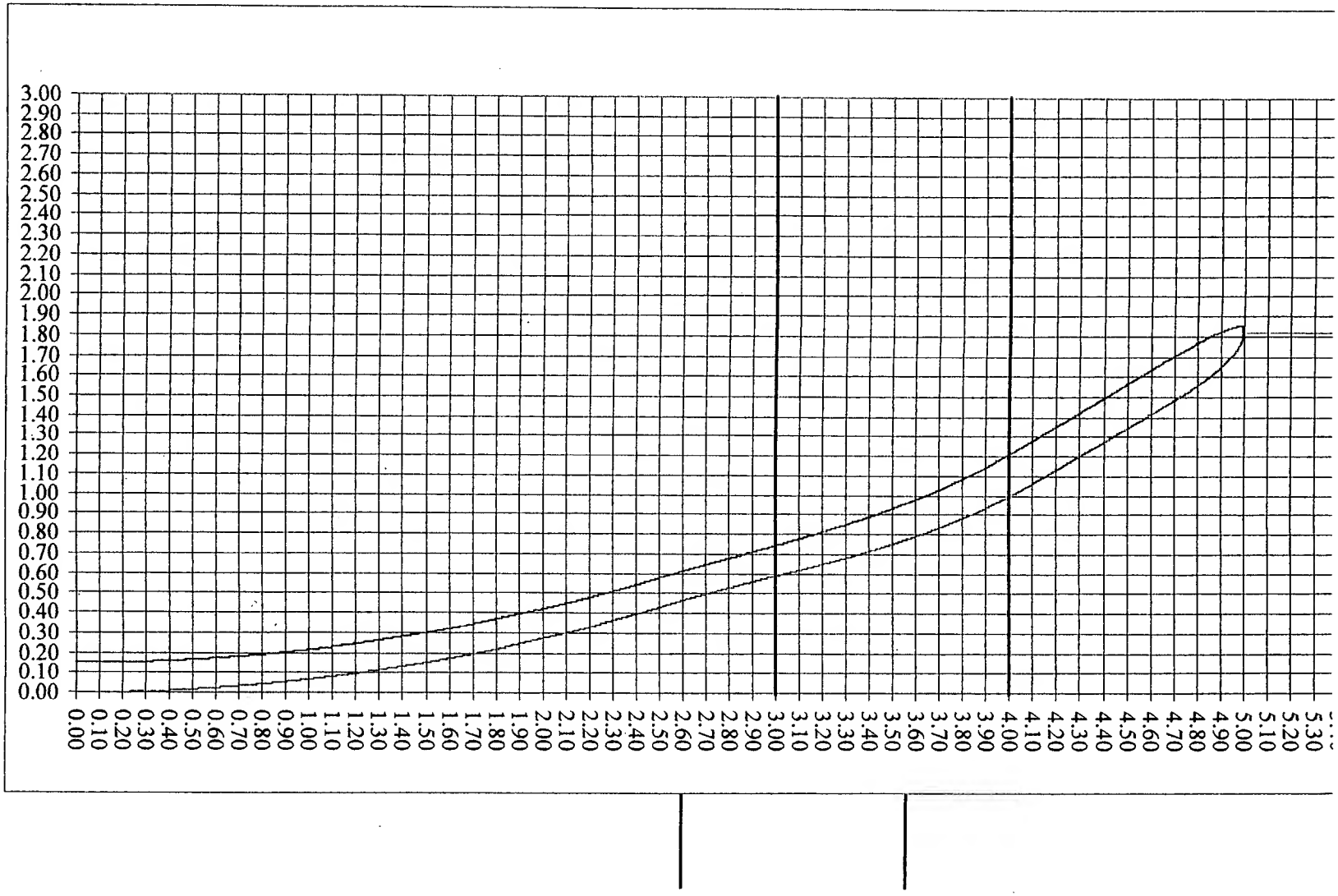

individual & cumulative volumes under lens
vol (mm3)
semicord
252
254
250

FIG.-38


3.00
2.90
2.80
2.70
2.60
2.50
2.40
2.30
2.20
2.10
2.00
1.90
1.80
1.70
1.60
1.50
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0.00 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80 0.90 1.00 1.10 1.20 1.30 1.40 1.50 1.60 1.70 1.80 1.90 2.00 2.10 2.20 2.30 2.40 2.50 2.60 2.70 2.80 2.90 3.00 3.10 3.20 3.30 3.40 3.50 3.60 3.70 3.80 3.90 4.00 4.10 4.20 4.30 4.40 4.50 4.60 4.70 4.80 4.90 5.00 5.10 5.20 5.30

T07250 - 5570360

FIG.-39

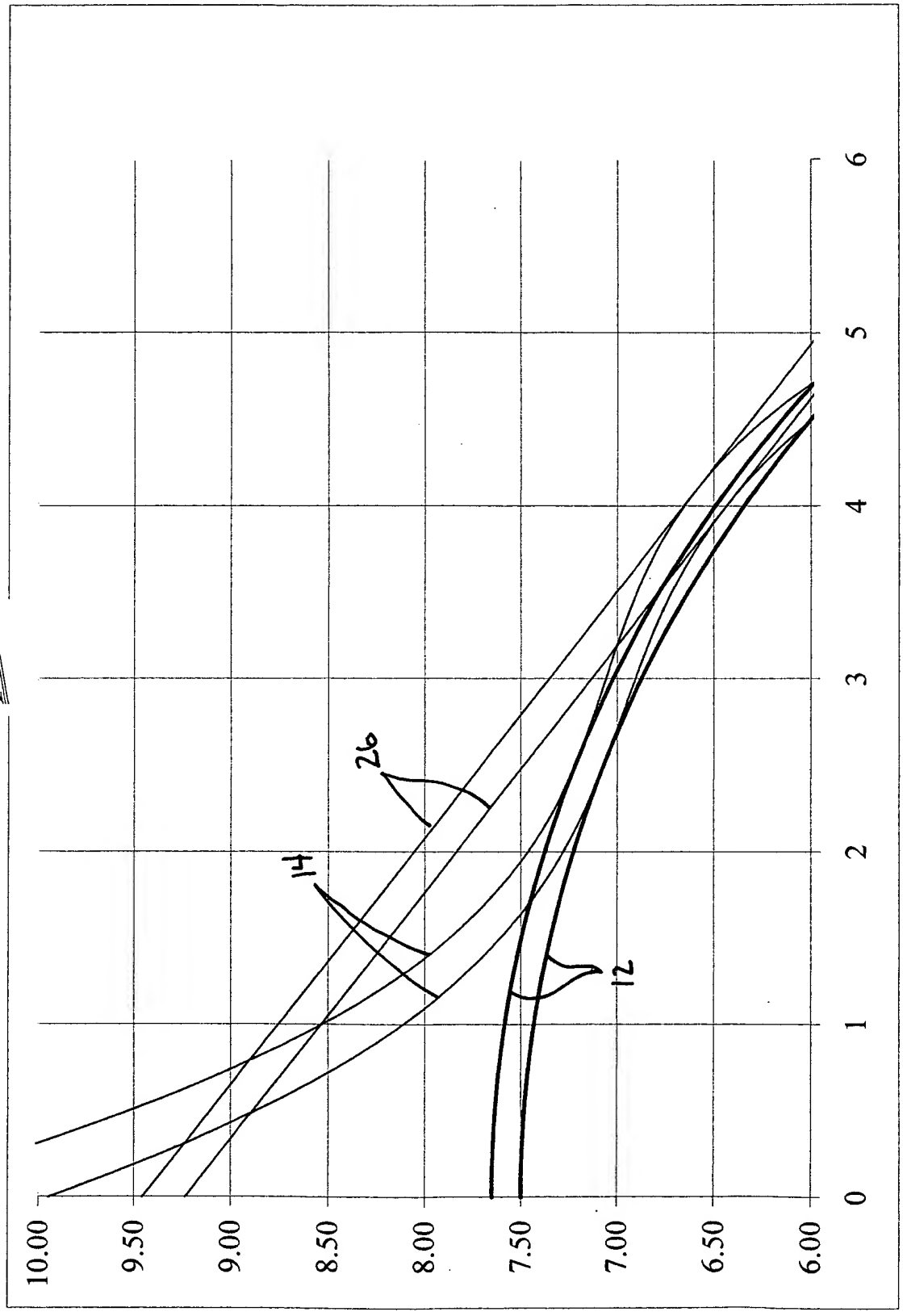
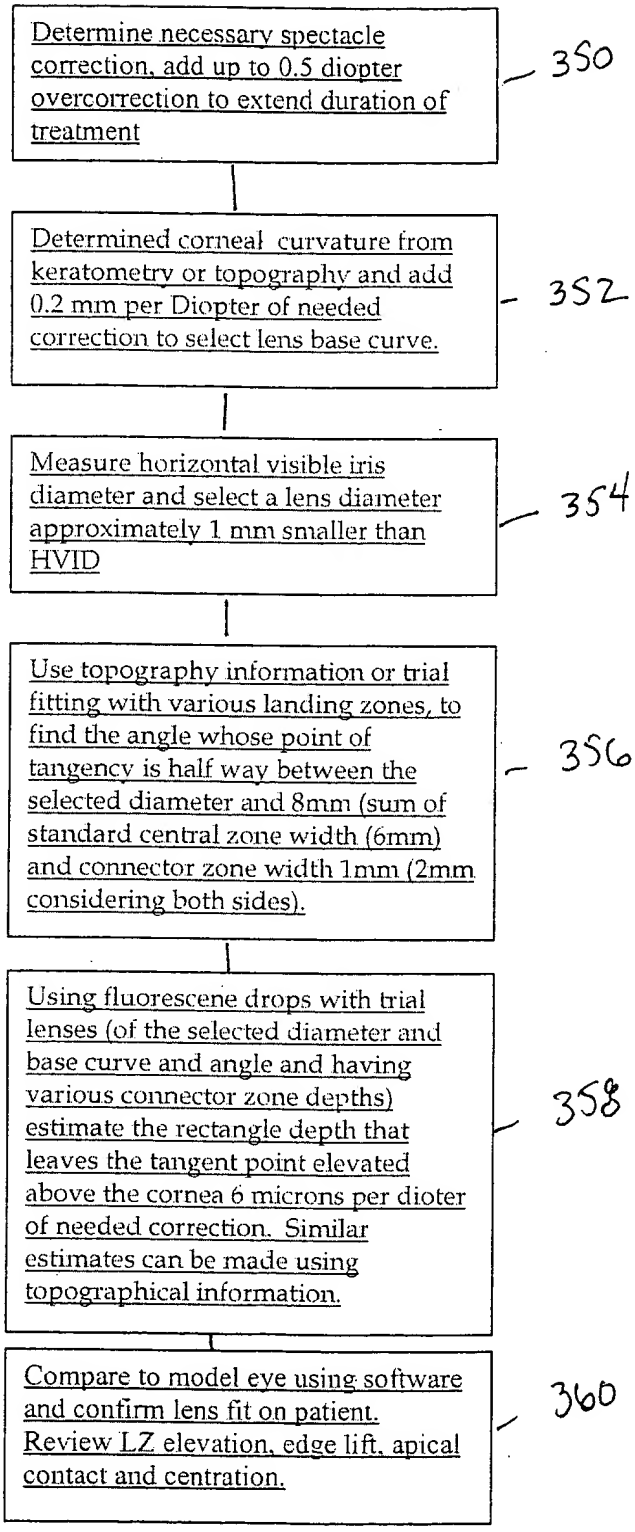


FIG. - 40


Determine necessary spectacle correction, add up to 0.5 diopter overcorrection to extend duration of treatment
350
Determined corneal curvature from keratometry or topography and add 0.2 mm per Diopter of needed correction to select lens base curve.
352
Measure horizontal visible iris diameter and select a lens diameter approximately 1 mm smaller than HVID
354
Use topography information or trial fitting with various landing zones, to find the angle whose point of tangency is half way between the selected diameter and 8mm (sum of standard central zone width (6mm) and connector zone width 1mm (2mm considering both sides).
356
Using fluorescene drops with trial lenses (of the selected diameter and base curve and angle and having various connector zone depths) estimate the rectangle depth that leaves the tangent point elevated above the cornea 6 microns per dioter of needed correction. Similar estimates can be made using topographical information.
358
Compare to model eye using software and confirm lens fit on patient. Review LZ elevation, edge lift, apical contact and centration.
360

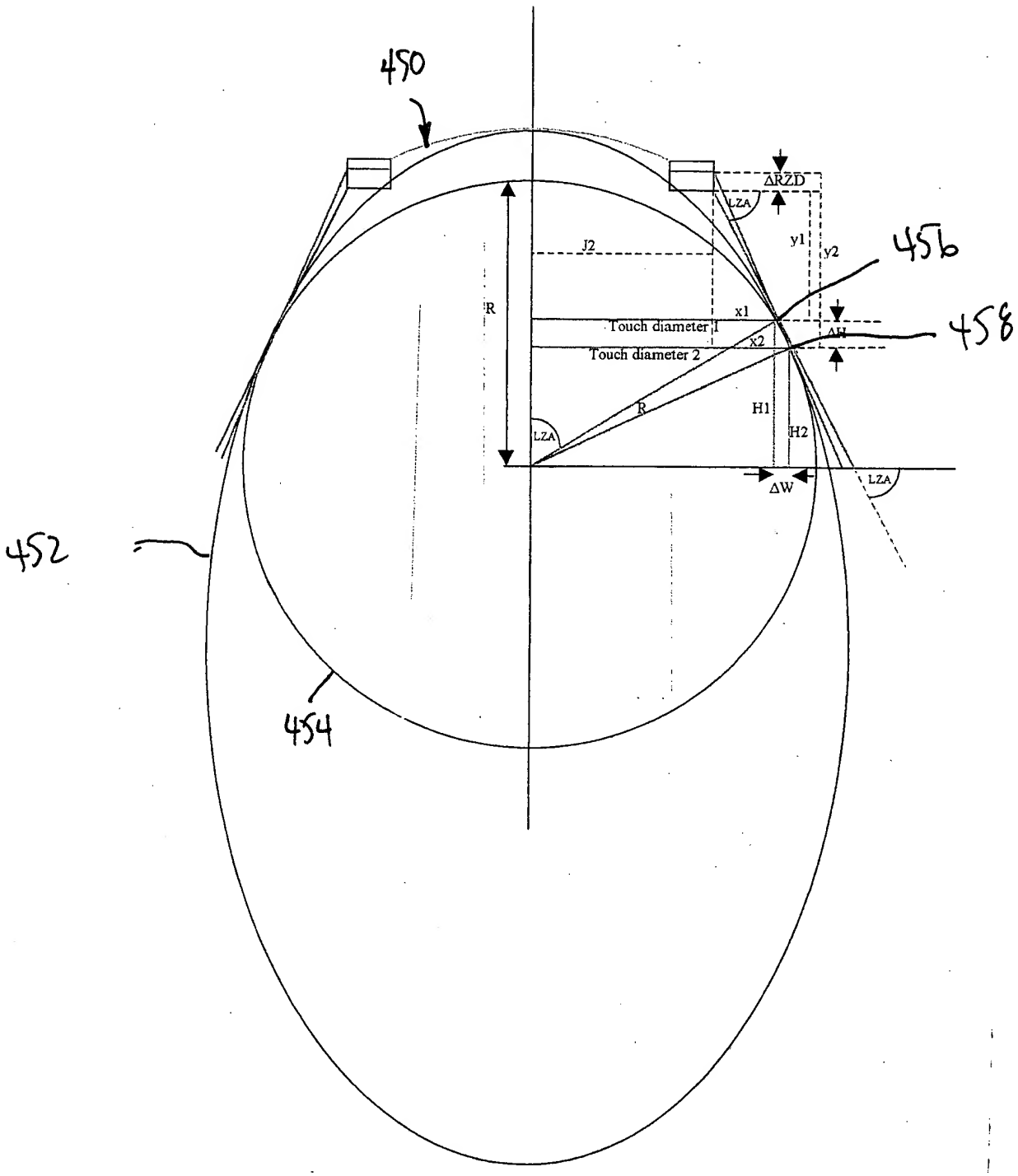
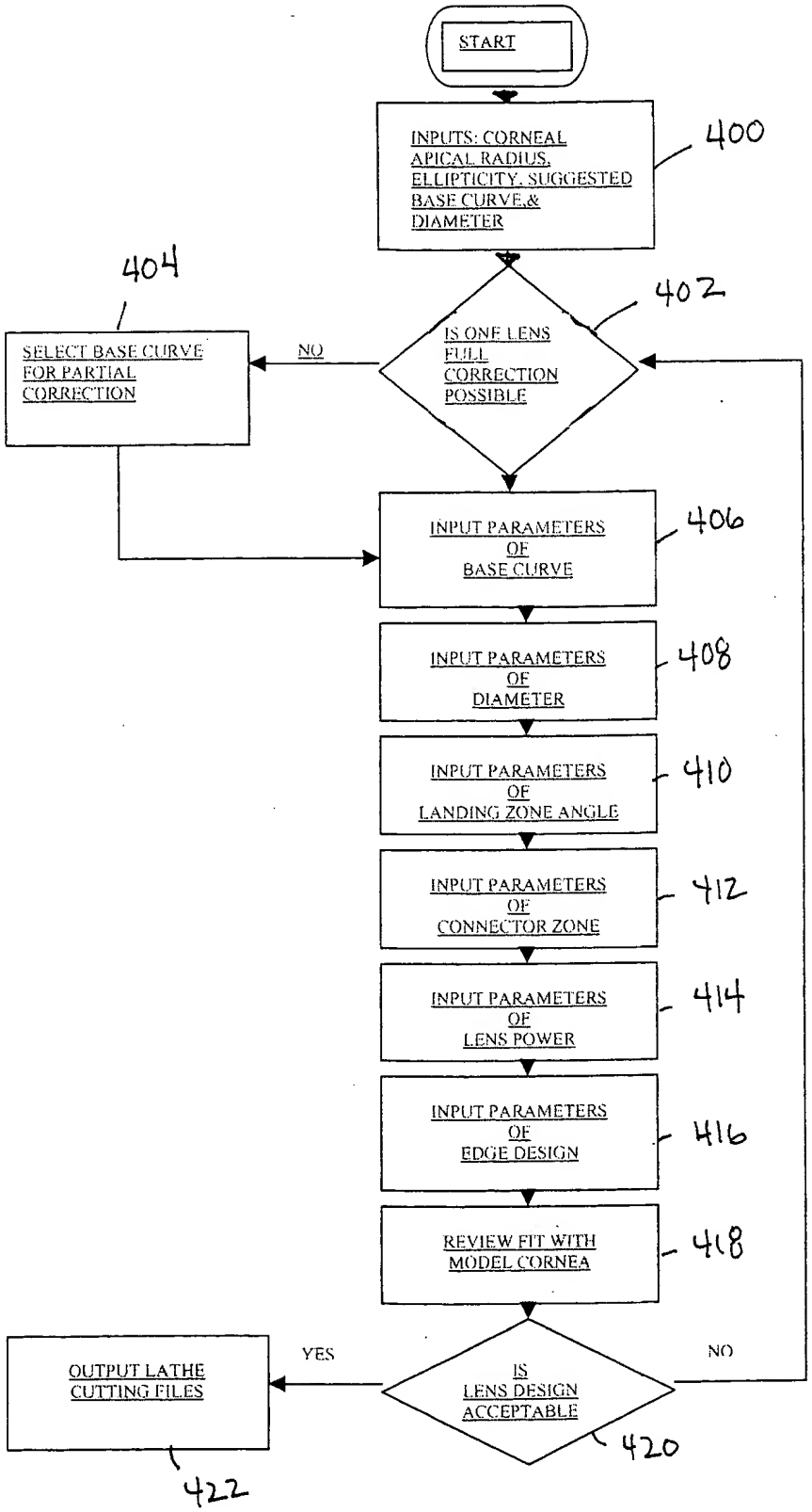

450
452
454
456
458
ΔRZD
LZA
y1
y2
J2
R
x1
Touch diameter 1
x2
Touch diameter 2
ΔH
R
H1
H2
LZA
ΔW
LZA

FIG.-4

FIG-42


START
INPUTS: CORNEAL APICAL RADIUS, ELLIPTICITY, SUGGESTED BASE CURVE,& DIAMETER
400
IS ONE LENS FULL CORRECTION POSSIBLE
402
NO
SELECT BASE CURVE FOR PARTIAL CORRECTION
404
INPUT PARAMETERS OF BASE CURVE
406
INPUT PARAMETERS OF DIAMETER
408
INPUT PARAMETERS OF LANDING ZONE ANGLE
410
INPUT PARAMETERS OF CONNECTOR ZONE
412
INPUT PARAMETERS OF LENS POWER
414
INPUT PARAMETERS OF EDGE DESIGN
416
REVIEW FIT WITH MODEL CORNEA
418
IS LENS DESIGN ACCEPTABLE
420
YES
NO
OUTPUT LATHE CUTTING FILES
422